G. H. Q. – A. E. F.
SECOND SECTION, GENERAL STAFF

MONOGRAPH
ON
WATERWAYS, ROADS, RAILROADS, AND BRIDGES

[7]

QUADRANGLE
SARREBOURG SOUTHWEST

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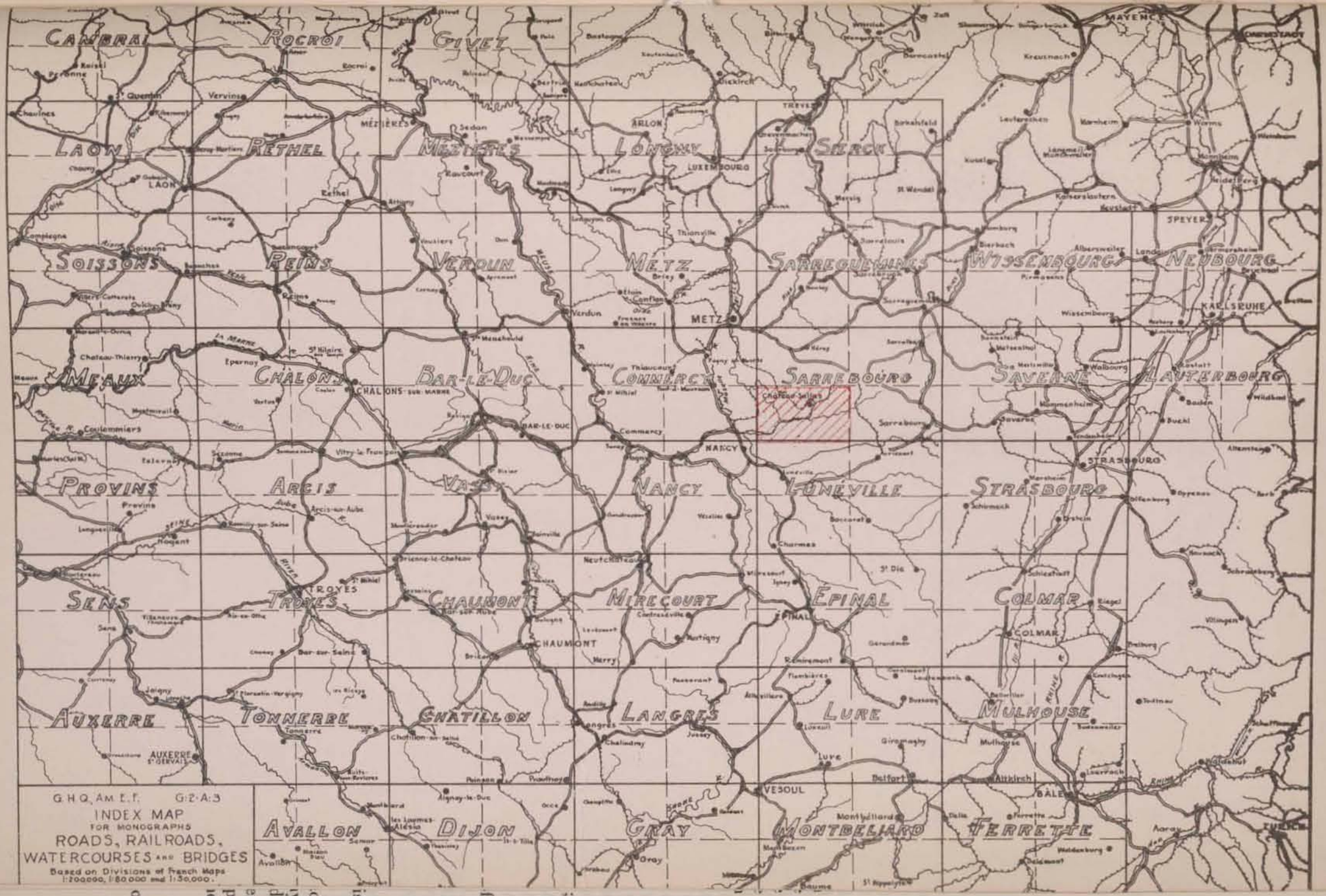
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LANGRES
LURE
MULHOUSE
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AVALLON
DIJON
GRAY
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FERRETTE
BALE
G.H.Q. AM E.F. G-2-A-3
INDEX MAP
FOR MONOGRAPHS
ROADS, RAILROADS,
WATERCOURSES AND BRIDGES
Based on Divisions of French Maps
1:200,000, 1:80,000 and 1:50,000.

G. H. Q., A. E. F.
SECOND SECTION, GENERAL STAFF

U.S. Army. A.E.F., 1917-1920, General Staff, G-2.

MONOGRAPH ON WATERWAYS, ROADS RAILROADS, and BRIDGES

QUADRANGLE
SARREBOURG SOUTHWEST

INDEX

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MONOGRAPH

ON

WATERWAYS, ROADS, RAILROADS, BRIDGES

TO

Accompany Road and Bridge Map

SARREBOURG SOUTHWEST

EXPLANATION

The information herein contained relates in detail to the following subjects:

WATERWAYS
- Canals
- Rivers
- Important Creeks

RAILROADS
- Main Lines
- Secondary Lines
- Narrow Gauge Lines

VILLAGES, TOWNS AND CITIES

ROADS AND HIGHWAYS
- National Roads
- Department Roads
- Communal Roads

BRIDGES
- Highway Bridges
- Railroad Bridges
- Canal and River Bridges

The area covered in this monograph is included in the 1:50,000-scale map of the French government as shown on the index map included herewith and in the subdivision of the monograph. The 1:50,000-scale map is in turn a subdivision of the 1:80,000- and the 1:200,000-scale maps, upon which the various area sheets are named as shown upon the index map. The 1:50,000-scale map of roads and bridges which accompanies the monograph is named as a subdivision of the 1:80,000-scale map. Thus: Sarrebourg Southwest.

General information is given as follows for the area in question:

The nature and character of streams, lakes, ponds, etc.;
The character and importance of railroads;
The nature and construction of the roads and connections;
The villages, towns, and cities.

Specific information is given as follows for the area in question:

Size of canals, dimensions and number of locks with size and capacity of boats, etc.;
Rivers, their character, size, fords, etc.
Railroads, number of tracks, clearance, roadbed, grades, cuts and fills, etc.
Roads, width, grade, width and nature of pavement.
Bridges: location as to a stream, railroad or highway: number of spans, class of construction, width of highway, etc. Photographs where possible.

Bridge information is given as follows:

(a) As being over an important stream.
(b) As being on a railroad;
(c) As being on a highway.

In this way most bridges appear twice and are cross-indexed. Location of bridges is shown upon maps and in case of cities, a larger scale map is given showing bridges.

Strength of Bridges.—No data is available as to the strength of bridges. Railroad structures will probably carry any load coming on them from ordinary traffic. When any load heavier than the engine concentration is to be carried the bridge should be examined.

Highway bridges will probably carry any load up to 12 tons on one axle. Heavier loads should be distributed if the filling of earth over the arch ring is less than one foot deep. No statement can be made as to the strength of metal bridges, as they vary as to design and material. As a rule, the older ones were designed for light loads.

SUPPLEMENT

As additional information is obtained it will be issued as an addendum to this monograph. When using this monograph, always examine the supplement.

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Sources of Information

Maps of the area, either French or German.

Notices of the Departments or of foreign regions issued by the Ministre de la Guerre, Commission de Geographie du Service Geographique de l'Armee.

Guide books, photographs, etc.

Abbreviations

Abut., abutment	Riv., river
C. I., cast iron	Canl., canal
Met., metal	rau., ruisseau (small stream)
Mas., masonry.	R. N., routes nationales
Timb., timber	G. C. D., department or important road
Br., bridge	I. C., communal or country road.

Table of French and German Terms with English Equivalents

Bois	Woods	Wald
Chemin	Road	Weg
Chemin de Fer	Railroad	Eisenbahn
Cheveaux	Horses	Pferde
Citerne	Tank	Behalter
Commune	Township	Gemeinde
Canton	District	Gebiete
Droite	Right	Recht
Est	East	Ost
Etang	Pond	Teich
Ecluse	Lock	Schleuse
Embranchement	Branch	Abzeigung
Exploitation	Working	Arbeits
Ferme	Farm	Hof
Fleuve	River	Fluss
Gauche	Left	Links
Genie	Engineer (military)	Pioneer
Grande Communication	Main Communication	Haupt Verbindung
Gue	Ford	Furt
Hauteur	Height	Hoch
Kilogramme	Kilogram	Kilogram
Kilometre	Kilometer	Kilometer
Longeur	Length	Breit
Metre	Meter	Meter
Mont	Hill	Hugel
Maison	House	Haus
Nord	North	Nord
Ouest	West	West
Overture	Opening	Offnung
Pont	Bridge	Brucke
Passage Inferieur	Undergrade Crossing	Weg unter den Eisenbahn Linien
Passage a Niveau	Grade Crossing	Bahnkreuzung
Passage Superieur	Overgrade Crossing	Weg uber den Eisenbahn Linien
Ruisseau	Brook	Bach
Riviere	Creek	Strom
Sud	South	Sud
Source	Spring	Spring Quelle
Voiture a 2 Roues	2-Wheeled Wagon	Waggon mit 2 Radern
Voiture a 4 Roues	4-Wheeled Wagon	Waggon mit 4 Radern

DESCRIPTION

The distinctive feature of the quadrangle is the River Seille which flows eastward through the center to Brin where it turns northward, leaving the quadrangle in the N.W. corner. Practically all of the streams are short tributaries of the Seille, most originating in the quadrangle. The country is one of rolling hills with gentle slopes, rising from one to three hundred feet above the level of the Seille Valley. The highest elevation, Grad Mont, in the southwest corner, is 210 meters (700 feet) above the Seille Valley.

WATERWAYS

The Seille

In this quadrangle, the Seille runs from east to west through the center of the quadrangle as far as Brin, where it turns towards the north and leaves the quadrangle in the N.W. corner.

The river rises in German Lorraine, in a region where there are many ponds and reservoirs. The slope of the valley through which it flows is not very great. The meadow lands adjacent to the stream are low and marshy, and subject to overflow in moderate floods to a maximum width of 1,800 feet. Floods occur in the winter months but may also be produced by summer rains. At such times the valley becomes a sheet of water. The bottom lands are very productive for this reason and are farmed in summer. The banks of the stream are low, abrupt and undercut; the bottom soft, slimy, and full of roots and grasses. The width varies 20 feet to 50 feet and at times it attains a width of 60 to 80 feet in places where it is shallow. The following list of bridges gives an idea of the width of the stream:

Marsal	15m.,	50 feet
Vic	12m.,	40 feet
Chambrey	14m.,	46 feet
Brin	31m.,	101 feet
Ajoncourt	30m.,	98 feet
Aulnoise	41m.,	134 feet

There are many fords, but they are neglected, abandoned, and often impassable during high water. It would be necessary to improve them and mark their passage with buoys. The depth of the stream varies greatly, reaching 10 to 12 feet in places.

The particular feature in the defense of the region is the ability of the Germans to cause an artificial flood in the valley. There are many artificial reservoirs in the headwaters, the principal one of which is Lindre Pond with a capacity of 600,000,000 cu.ft. of water (14,000 acre-feet). These ponds are filled from the drainage basin above. After May 15, it is rare that sufficient water falls to fill the reservoirs if empty at that date. By opening the gates of these reservoirs and by the use of restraining dams in the valley, an artificial flood could be produced which would be felt in six hours at Chambrey and would be complete in two or three days. Bridges would be carried away. The width of the inundation would vary from 500 to 2,000 feet with an average of from 600 to 1,000 feet. It is estimated that eight days would be required for the water to run off and that the meadows would be impassable for five or six days longer. For this reason, in any operations, the dams should be destroyed beforehand.

In 1904, five dams were constructed between Moyenvic and Vic for the irrigation of the plain during the summer; this was done at the common expense of the communes and the military budget. These dams were constructed of two piers of masonry on either side of the river with a tie-beam, into which were slipped thick planks laid one on top of the other. The country could be covered with water in a night by making use of these dams. The Seille could then only be crossed by the bridges at Burthecourt, Vic and Moyenvic, which at all times could be swept by artillery fire.

Below Marsal, the Seille receives, to the left, the Salines Canal; it then passes by Moyenvic, receives, to the right, near Salonne the Petite Seille coming from Morhange, whose valley, because of its little slope, is frequently inundated during the rainy season. Opposite Pettoncourt, it is swelled, to the left, by the Loutre Noire, a brook 4m. wide, never dry and frequently flooded. At Brin, the Seille takes a northerly direction and receives no other important affluent except the Osson brook and the brook from the Pond which cuts deeply into the right bank of the Seille as far as the Chateau Salins-Metz highway. In this part of its course, the Seille describes a series of windings as far as Cheminot, where it enters into annexed territory. From Chambrey to Letricourt, it separates France from Lorraine; from Letricourt to Cheminot, it returns to France and finally leaves French territory at Cheminot.

Important points on the river (bridges are noted under that heading):

Marsal. Dam No. 6 S. W. of and near the village. One pier and two abutments in masonry with grooves in the upstream side for closing the dam with planks of from 4.5m. to 5m. in length (15.6 feet to 16.5 feet) x .2m. (.65 feet) thick.

Pettoncourt. Ford just below the reinforced concrete bridge.

One km. above Brin. Ford called "de la Madeline."

Atilloncourt. Ford; practicable for six months, May to November; depth, .5m.; width, 10m. and length, 20m.

Brin. Ford below the confluence of the Rau. de Brin opposite Brin Basse.

Manhoue. Between the mill of Manhoue and the mill of Chambille, three fords. Depths, 0.7m., 0.5m., and 0.7m.; lengths, 18m., 25m., and 30m.; widths, 3m., 3m., and 10m.

Mill of Chambille (France). Dam and passerelle; ford 100m. below the mill.

Han (France). Ford just below the bridge.

Ajoncourt. Ford over the head race of the mill of Arrage; depth, 0.4m.; length, 15m., and width, 3m. Ford over tail race. Ford 80m. below the confluence of the river and the tail race; for pedestrians.

Chenicourt. Ford.

Aulnois sur Seille. Ford below the bridge.

Graincourt. Ford.

Letricourt. Ford.

St. Martin. Ford.

Rau. Petit Seille

The source of the stream is at Racrange, near Morhange. It is 24km. long and joins the Seille at Salonne. The valley was formerly very marshy, but rectification of the course of the stream and dredging have improved the meadow land. Between Amelcourt and Chateau Salins, the Gris-Loup swamp is partially dried. Width of the stream, 6m.; depth, 1.6m. Refer to bridge list for definite widths.

Bridges are noted under that heading.

Burlincourt. Ford 250m. above the bridge.

Rau. Amezule

This stream rises near Erbevillers and flows west to the Meurthe. In this quadrangle, it is without importance. The width is from 4m. to 8m., the depth from 1m. to 1.5m. It is fordable at many points at all seasons. The bed is muddy. The width of the valley is from 400m. to 800m. The course is sinuous and it flows through open fields.

Bridges are given in the bridge list.

Champenoux. Ford 200m. above; depth, 0.2m.; length, 5m.; width, 6m.; practicable at all seasons.

Right of the Farm de la Bouzoule. Ford at local road; depth, .2m.; length, 6.3m.; width, 5m.

Amance. Ford 400m. above the local road to the route Laitre-sous-Amance to Laneuvelotte; depth, 0.5m.; length, 10m.; width, 5m.; impracticable during heavy floods.

Laitre-sous-Amance. Ford 600m. below the stone bridge, at a local road, not paved; depth, .6m.; length, 10m.; width, 5m. Impracticable at floods.

Rau. Loutre Noire

This stream has its source in the neighborhood of Rechicourt-la-Petite near the Lorraine frontier and flows N. W. to the Seille at Pettoncourt. It has a total length of 176km. The stream bed lies in colored marls and is not cut very deep. Floods are somewhat rare and of no importance. The width can be determined from the bridges and fords noted. Valley is closed in between limestone banks. Bridges are given under that heading.

Bezange-la-Grande. Ford just above the timber foot bridge. Depth average, 0.3m.

Another ford on a local road below the mill St. Marie. Depth 0.4m.; length 10m.; width, 3m.

Moncel-sur-Seille. Ford below the mill of Moncel. Average depth, 0.2m.; length, 12m.; width 3m.

Two other fords above and below the timber bridge which crosses the stream 200m. below the village.

Rau. Pres St. Thibaut

A small brook of a length of 3.6km., enters the Loutre Noire 1½km. above Moncel. The bed is muddy, the width varies from 1 to 2m. and the depth from 1 to 1.5m. Floods unimportant, reaching a maximum of 37 second feet. Fordable all the year at the crossing of the road Sorneville to Hoeville.

Depth, 0.2m.; length, 10m.; width, 2m.

Rau. de Geneva

A small brook, 3.5km. long, which enters the Loutre Noire at Moncel. Floods unimportant with a max. discharge of 53 second feet. Channel is well defined. The bottom is muddy. The width varies from 1 to 3m. and the depth from 0.8m. to 1.7m. The width of the valley varies from 300 to 400m. No factories or mills on the stream.

Bridges are given under that heading.

Sorneville. Ford 400m. below the bridge; depth, .15m.; length, 6m.; width, 3m.

Rau. de Mazerulles or Brin

A small brook, 3.8 km. long, which enters the Seille from the south at Brin. Same characteristics as the rau. Geneva above. Max. flood discharge, 110 second feet.

Bridges given under that heading.

Mazerulles. Ford. Local road to farm de Ramont; depth 0.3m.; length, 10m.; width, 2m.

Rau. Gensey

This brook rises near Bouxieres-aux-Chenes and flows south to the Amazule at Donmartin-sous-Amance. It has a length of 3.4km. For the first part of its length, it flows in a valley closely defined and in a definite channel. In the lower section, it flows through meadows and here floods overrun the banks and spread out to an average width of 80m. Floods are of short duration. The average width is 3m. and the depth, 1m. Depth at flood in the lower section, 1.3m.

Bridges are given under that heading.

No fords are noted.

Rau. Etang St. Jean

The stream is formed at Delme by the junction of two unimportant rivulets. It forms a serious impediment, even for infantry, as far as its confluence with the Seille. The channel, slightly cut in the earth, has an average width of from 3 to 4m. and a depth of from 0.8m. to 1m. (0.6-0.8m. of water). Its bottom is quite slimy and grown with weeds. The course of 13km. length is fringed with trees and is parallel to the rau. d'Osson. No fords are noted.

Bridge sare given under that heading.

Rau. d'Osson

This stream rises near Fresnes en Saulnois, has a length of 12.5km. and joins the Seille below Ajoncourt. The valley is a deep depression and the terrain is formed of solid meadow land, well adapted to the evolution of troops. It is easily crossed, except where it cuts deep into the ground above Fossieux.

Bridges are noted under that heading.

No fords are noted.

RAILROADS

LINE: NANCY TO SAARALBEN VIA CHAMPIGNEULLES, MONCEL AND CHATEAU SALINS

Single-track, standard-gauge line with heavy grales. Enters the quadrangle at Dommartin-sous-Amance.

For preceding sections, see Commercy, S. E.

Station at Eulmont-Agincourt. (Commercy S. E.).

Grade crossing. Dept. road No. 14, Nancy to Metz; width, 5m.

Masonry bridge over the rau. Blanzey; length, 3m. Bridge No. 171 (Commercy S.E.)

Five grade crossings. Local roads; width, 4m.

Dommartin-sous-Amance. Masonry bridge over rau. Genzey; one opening, 1.5m.; length, 2.7m.; width, 5m. Bridge No. 110.

Station at Laitre-sous-Amance.

Six grade crossings. Road, width, 4m.

Bonzule Stop.

Culvert. Vaulted; brook; opening, 2m. Bridge No. 111.

Eight grade crossings. Roads, width, 4m.

Grade crossing. G. C. D. No. 19 from Luneville to Array; width, 4m.

Station at Brin.

Bridge. Vaulted over the rau. Mazerulles; opening, 5m. Bridge No. 112.

Six grade crossings. Roads, width, 4m.

Station at Moncel.

Grade crossing. Road, width, 4m.

Bridge. Vaulted; over the Loutre Noire; length, 14.4m.; four arches. Bridge No. 113.

Culvert. Vaulted; irrigation ditch; opening, 2m. Bridge No. 114.

Two grade crossings. Roads, width, 4m.

German frontier.

The following section to Bensdorf, has a length of 31.7km., of which 14.218km. is level and 17.192km. on a grade, and 20.097km. is straight and 11.613km. curved. Grades vary from 0.5 per cent. to 1 per cent. max., the latter between Salonnes and Chateau Salins. Curves not very numerous; max. radius of curves, 300m. (1000 ft. or 5 deg. 40 min.) at the station Chateau Salins. Cuts and fills numerous. Bridge over the Seille principal work. Engine houses at Chateau Salins and Bensdorf. Water tanks at Chambrey, Chateau Salins and Bensdorf. Operation by telephone.

Important points from the German frontier on:

Cut. To the right; length, 150m.

Fill. Length, 200m.

Culvert over a brook. Bridge No. 115.

End of fill.

Station at Chambrey. Receipt building to the right; telegraph office; two main tracks, one of which is a turn out; length, 450m.; custom building to the left after passing the receipt building; building for housing the employees at the right of the entrance into the station; freight shed 36m. long, to the left before and adjoining the customs building; two commercial platforms, one of which, to the left, is 30m. x 8m. and the other, to the right, 30m. x 6m.; two 20 and 30-ton scales; 6-ton loading crane; two stone platforms, each 110m. long, one to the right and the other to the left; two sidings, 500m. and 120m. long, blind at either end and joined to the main tracks by a switch; these sidings serve the freight shed, the platform and the customs building; knot of three double-entry sidings, 200m., 400m., 500m. long, to the right; one industrial extension to the salt works, switched upon the other sidings; shed for two engines, to the right, at the end of the station, with a 20m. diameter turntable, served by a track switched upon the knot of three tracks described above; 150 cu.m. water tank to the right before coming to the engine shed. Alt. 203.6m.

Maximum up-grade between Chambrey and Burthecourt, 1.333; 0.75 per cent.

Fill. Length, 300m.

Culvert over a brook.

End of fill.
Cut to the right. Length, 200m.
Fill. Length, 500m.
Cut. Length, 100m.
Fill. Length, 200m.
Cut. Length, 150m.
Fill. Length, 1km.
Culvert over brook from the Chateau of Burthecourt. Bridge No. 117.
Station at Burthecourt. Receipt building to the right; telegraph office; four main tracks; two to the left, one of which is a turn out for the Nancy-Saaralben line; two to the right, one of which is a turn out for the line from Burthecourt to Vic; one switch; freight shed to the right adjoining the receipt building; stone platform to the right, 30m. long; siding to the right serving the freight shed and switched in the direction of Vic, blind at the other end; 275m. double-entry siding to the left. Alt. 207.7m.
Maximum down-grade between Burthecourt and Salonnes, 1-333; 0.75 per cent.
Branch to the right. Line from Burthecourt to Vic.
Culvert over a brook. Bridge No. 118.
End of fill.
Cut. Length, 200m.
Fill. Length, 150m.
Fill. Length, 300m.; height, 1.7m.
Bridge over the Seille. Metal skew bridge, 70 deg.; two 9m. spans; piers and abutments of masonry; thickness of the piers, 1.2m.; clearance, 3.3m.; foundation marly. Not mined. Bridge No. 119.
End of fill.
Stop at Salonnes. Exclusive passenger, baggage and express stop. Receipt building to the left. Alt. 201.7m.
Maximum up-grade between Salonnes and Chateau Salins, 1-100; 1.0 per cent.
Cut. Length, 400m.; max. depth, 2.8m.; curved.
Cut. Length, 400m.; max. depth, 3m.
Culvert over a brook. Bridge No. 120.
Cut. Length, 200m.; max. depth, 5m.; curved.
Culvert over the rau. de la Sucrerie; 3m. opening. Bridge No. 121.
Fill. Length, 500m.
Station at Chateau Salins. Receipt building to the left; telegraph office; three main tracks, of which the one to the right is common to the lines from Nancy to Saaralben and the line from Metz to Chateau Salins for the trains coming from Nancy or going to Metz; one in the middle, for the trains coming from Saaralben; one to the left, for the trains coming from Metz; two freight sheds to the left before coming to the receipt building; two commercial platforms to the left, one of which is 72m. long.; 26-ton scales; two 6-ton loading cranes; stone platform to the left, 300m. long; three 180, 260 and 300m. sidings to the left, switched in the direction of Burthecourt and blind at the other end; knot of four double-enrty sidings, from 465m. to 590m. long, to the right; one industrial extension, 1.2km. long, to the left connecting with the salt works and a Solvay soda plant; there are three sidings, from 100m. to 300m. long, in the interior of the plants; 50cu.m. water tank to the left after passing the receipt building; 13.4m. diameter turntable for engines. Alt. 205.4m.
Maximum up-grade between Chateau Salins and Hampont, 1-200; 0.5 per cent.
Over grade crossing. Highway from Chateau Salins to Vic. Metal bridge; one span of 16.5m. opening, composed of two straight master girders, semicircular upper chord, 17.5m. long and 2.1m. rise of five intermediate girders, 17.5m. and .8m. thick; width of the roadway, 8.3m.; masonry abutments; metal railing. Bridge No. 122.
The line Chateau Salins to Metz cuts off to the left.
Cut. Length, 750m.; max. depth, 10m.; masonwork banks.
Fill to the left. Length, 600m.; cut to the right; length, 300m.
Culvert over the rau. of Olimpre. Metal bridge; one span of 2.25m. Bridge No. 123.
End of fill.

Cut. Length, 300m.; max. depth, 6m.
Fill. Length, 400m.
Cut to the right. Length, 700m.
Fill. Length, 600m.
Two culverts over brooks. Bridges No. 124.
End of fill.
Cut. Length, 250m.
Overgrade crossing. Road from Hedival to the Gaite Inn. Bridge No. 125.
End of cut.
Fill. Length, 700m.
Cut. Length, 200m.
Fill. Length, 500m.
Culvert over a brook. Bridge No. 125A.
End of fill.
Cut. Length, 100m.
Fill. Length, 700m.
Station at Hampont. Receipt building to the right; telegraph office; two main tracks, one of which is a turn out 503m. long; freight shed to the right after passing the receipt building; 25m. long commercial platform; 25-ton scales; 3-ton loading crane; sidings of a total length of 938m. Alt. 210.4m.
Maximum up-grade between Hampont and Habudungen, 1-200; 0.5 per cent.
End of fill.
Cut. Length, 200m.; max. depth, 7m.; curve.
Fill. Length, 1.1km.
Bridge over the Flotte Graben. Masonry bridge; one arch. Bridge No. 126.
End of fill.
Cut. Length, 150m.
Fill. Length, 400m.
Cut. Length, 100m.
Fill. Length, 100m.
Cut. Length, 100m.
Two fills. Length, each 300m.
Cut. Length, 300m.
Cut. Length, 150m.
Fill. Length, 100m.

For succeeding section, see Sarrebourg N. W.

Line: Chateau Salins to Metz

This is a single-track, standard-gauge line. All platforms and other works built for a single track. Vignole rails, profile XI on timber ties. Grades vary from .4 per cent. to 1.5 per cent. max. which is attained at many points. Curves are numerous and of small radius, the minimum of 300m. (1000ft. or 5 deg. 40 min.) occurs many times. Cuts and fills are numerous and important. Important works: Viaduct over the rau. de Berupt and three bridges over the Seille. Locomotive sheds at Metz and Chateau Salins. Water tanks at Chateau Salins, Delme, Coin-sur-Seille and Metz. Opened for traffic in 1904.

Important points on the line:

Station at Chateau Salines. (See the Nancy-Saaralben line for a description of this station.) Alt. 205.4m.
Max. grade between Chateau Salins and Fresnes en Saulnois, 1-67; 1.5 per cent.
The line is paralleled on the right by the single-track line from Nancy to Saaralben.
Cut. Length, 400m.
Overgrade crossing, Chauteau Salins to Vic. One span of 16.5m. opening, formed of two plate girders, 17.5m. in length and 2.1m. rise with semi-circular upper chord, and five intermediate girders, 17.5m. long and 0.80m. high; width of the roadbed, 8.30m.; masonry abutments; metal railing. Bridge No. 131.
End of cut.
The Nancy-Saaralben line cuts off to the right.
Bridge over the Muhlen Bach, the eastern arm of the Petite Seille. Metal skew bridge; one span of 16.3m. opening, composed of two plate girders, braced apart 4.1m., at the height of 0.47m., and of two intermediate girders, 0.47m. high and spaced 1.52m. apart; upper flooring; metal railing; masonry abut-

ments support the span on quadrangular blocks of cast steel, .70m. the side, with an expansion roller; two service sidewalks, 90m wide, encorbelled on either side of the bridge. Bridge No. 132.

Fill. Length, 500m.

Bridge over the Vieille-Seille, western arm of the Petite Seille. Metal skew bridge, 45 deg.; one span of 22.75m., formed of two straight interlaced plate girders, 22.75m. long, 3m. high and spaced 5m., and of two intermediate girders, 1.6m. apart, supporting the rails; lower flooring of laced flooring; masonry abutments support the span on quadrangular blocks, .70m. per side, with an expansion roller; normal opening of 15m. Bridge No. 133.

End of fill.

Bridge over a brook. Metal bridge; one span. Bridge No. 134.

Cut. Length, 150m.

Fill. Length, 500m.

Bridge over the above mentioned brook. Metal bridge; one span. Bridge No. 135.

Undergrade crossing. Road leading to the meadows of the Seille. Metal bridge; one span of 4.5m. opening and 5.2m. long, composed of four plate girders; two of which are spaced 2.06m. and two intermediate spaced, 0.96m.; masonry abutments support the girders from the bank in the same manner as in the preceding bridges; two service sidewalks, encorbelled on either side, with a metal railing; the sidewalks are 1m. wide and railings 1m. high. Bridge No. 136.

End of fill.

Fill. Length, 200m.

Bridge over the Muhlen Bach. Bridge No. 137.

Cut. Length, 100m.

Fill. Length, 300m.; curved.

Culvert over a brook. Bridge No. 138.

Bridge over the Muhlen Bach. Metal bridge on a curve of 300m. radius; one span of 2m. opening and 2.6m. long; two straight plate girders braced at a spacing of 1.6m.; masonry abutments support the girders in the same manner as in the preceding bridges; two service sidewalks, 1.21m. wide, encorbelled on either side of the bridge with metal railings 1m. high. Bridge No. 139.

End of fill.

Cut. Length, 300m.

Fill. Length, 400m.

Undergrade crossing. Road from Chateau Salins to Metz. Metal skew bridge of 56 deg. 20 min.; one span of 12m. and 11m. opening, oblique, and 8m. normal opening; two straight plate girders, braced at a height of 1.25m. and 1.7m. apart; masonry abutments support the girders in the same manner as in the preceding bridges; wing walls; two service sidewalks, 1.66m. wide and encorbelled on either side of the bridge, with metal railings 1m. high. Bridge No. 140.

End of fill.

Cut. Length, 300m.

Fill. Length, 100m.

Bridge over a brook and a local road. Metal bridge; one span of 5.2m. and an opening of 4.5m.; two plate girders, braced at a height of 0.55m.; and spaced 1.6m.; masonry abutments support the girders in the same manner as in the preceding bridges; two service sidewalks, 1m. wide, encorbelled on either side of the bridge, with metal railings 1m. high. Bridge No. 141.

End of fill.

Cut. Length, 100m.

Fill. Length, 200m.

Undergrade crossing. Local road. Metal bridge, one span of 4.5m. opening and 5.5m. long; two plate girders, braced at a height of .56m., and spaced 1.6m.; masonry abutments support the girders in the same manner as in the preceding bridges; two service side-walks, 1.02m. wide, encorbelled on either side of the bridge, with metal railings 1m. high. Bridge No. 142.

End of fill.

Cut. Length, 250m.
Fill. Length, 100m.
Cut. Length, 250m.
Overgrade crossing. Road from Coutures to Houdremont Farm. Masonry bridge; one arch. Bridge No. 143.
End of cut.
Fill. Length, 500m.
Undergrade crossing. Local road; masonry bridge; one arch. Bridge No. 144.
End of fill.
Cut. Length, 350m.
Fill. Length, 300m.
Undergrade crossing. Local road. Bridge No 145.
End of fill.
Cut. Length, 150m.
Fill. Length, 100m.
Cut. Length, 400m.
Fill. Length, 250m.
Undergrade crossing. Local road. Metal bridge; one span of 5m. opening and 5.7m. long; four plate girders, braced at a height of 0.37m.; the two from the bank are spaced 2.12m. and the two intermediate at a distance of 0.92m.; masonry abutments support the girders from the bank in the same manner as in the preceding bridges; two service sidewalks, 1.07m. wide, are encorbelled on either side of the bridge, with metal railings 1m. high. Bridge No. 146.
End of fill.
Cut. Length, 500m.
Overgrade crossing. Konigin Weg (Road de la Reine). Masonry bridge; one arch. Bridge No. 147.
The line is paralleled to the right by a 340m. siding, near which is a telephone booth, the wires of which are connected to those of the railroad line.
End of cut.
Two fills. Length, 400m. and 200m.
Two cuts. Length, 200m. and 350m.
Fill. Length, 550m.
Station at Fresnes-en-Saulnois. Receipt building to the left, entrance to the station; telegraph office; two main tracks, one of which is a turn out 300m. long; commercial platform, 25m. x 4m.; 30-ton scales; 6-ton loading crane; stone platform to the left, 130m. x 11m.; 150m. siding, serving the platform and the commercial platform, blind at both ends and joined to the main tracks by two switches. Alt. 284.5m.
Maximum down-grade between Fresnes-en-Saulnois and Oriocourt, 1-67; 1.5 per cent.
End of fill.
Cut. Length, 300m.
Overgrade crossing. Road from Fresnes-en-Saulnois to la Neuvevilde-en-Saulnois. Metal bridge. Bridge No. 148.
End of cut.
Fill. Length, 150m.
Cut. Length, 650m.
Fill. Length, 200m.
Cut. Length, 300m.
Fill. Length, 300m.
Cut. Length, 150m.
Station at Oriocourt. Receipt building to the left; telegraph office; commercial platform, 25m. x 4m., to the left before coming to the receipt building; 30-ton scales; 6-ton crane; stone courtyard, 140m. x 11m.; one 200m. siding serving the two platforms (commercial and stone courtyard), blind at both ends and linked to the main track by two switches. Alt. 250.6m.
Maximum down-grade between Oriocourt and Delme, 1.5 per cent.
Fill. Length, 600m.

Culvert over an irrigation ditch. Bridge No. 149.
End of fill.
Fill. Length, 200m.
Cut. Length, 200m.
Fill. Length, 250m.
Cut. Length, 300m.
Overgrade crossing. Road from Donjeux to the Metz-Chateau Salins highway; masonry bridge; one arch. Bridge No. 150.
End of cut.
Fill. Length, 500m.
Bridge over the St. Johann Bach. Bridge No. 151.
End of fill.
Cut. Length, 500m.
Station at Delme. Receipt building to the right, at the entrance to the station; telegraph office; tax (office); two main tracks, one of which is a turn out 380m. long; freight shed, 5m. x 4m., to the right after passing the receipt building; 25m. x 4m. commercial platform; 30-ton scales; six-ton, loading crane; 25m. x 4m. commercial platform; 30-ton scales; 6-ton loading crane; 200m. x 12m. stone platform, 200m. siding to the right, serving the freight shed and the platform, blind at both ends and joined to the main tracks by two switches; 20cu.m. water tank at the end of the stone platform. Alt. 233.6m.
Maximum up-grade between Delme and Puzieux, 1-67, 1.5 per cent.
End of cut.
Fill. Length, 800m.
Undergrade crossing. Local road from Delme to the St. Johann Bach Meadows. Metal bridge; one span. Bridge No. 152.
Bridge over the St. Johann Bach. Metal bridge; one span. Bridge No. 153.
Undergrade crossing. Local road from Delme to the Meadows of the St. Johann Bach. Metal bridge; one span 6.05m. long and of 5.29m. opening; two plate girders, braced at a height of 0.66m., and spaced 2.5m. apart. Two intermediate girders, 0.33m. high, and spaced 1.5m. apart; masonry abutments support the girders in the same manner as in the preceding bridge; two service sidewalks, 1m. wide are encorbelled on either side of the bridge, with metal railings 1m. high. Bridge No. 154.
End of fill.
Cut to the right. Length, 300m.
Fill. Length, 150m.
Cut. Length, 500m.
Overgrade crossing. Local road. Bridge No. 155.
End of cut.
Fill. Length, 150m.
Culvert. Flood channel. Bridge No. 156.
End of fill.
Fill. Length, 300m.
Culvert over a brook. Bridge No. 157.
Undergrade crossing. Road joining two local roads which parallel the tracks to the right and left. Metal bridge; one span. Bridge No. 158.
End of fill.
Cut. Length, 550m.
Fill. Length, 200m.
Stop at Puzieux. Exclusive passenger, baggage and express stop. Receipt building to the right; telegraph office. Alt. 258.2m.
Maximum up-grade between Puzieux and Liocourt, 1-100; 1.0 per cent.
End of fill.
Cut. Length, 200m.
Overgrade crossing. Local road from Puzieux to Alaincourt. Bridge No. 159.

For following section, see Sarrebourg N.W.

Line: Burthecourt to Vic

Secondary single-track line, standard-gauge. Length of the line, 3.03km. of which 875m. are level, 2.155km. grade; 1.794 km. straight and 1.236km. curve. Max. grade, 1-100; 1.0

per cent.; four curves of 500m. (1640 ft.) radius (3 deg. 30 min. curve) between Burthecourt and Vic. Many cuts and fills. Engine shed and water tank at Vic.

Important points on the line:

Station at Burthecourt. (See the Nancy-Saaralben line for a description of this station.) Alt. 207.6m.

Branch to the left. (At the exit from the above station.) Line from Nancy to Saaralben.

Fill. Length, 200m.

Culvert over a brook. Bridge No. 127.

End of fill.

Cut. Length, 350m.; max. depth, 4m.; curve.

Fill. Length, 200m.

Fill. Length, 1.6km.

Culvert over an irrigation channel. Bridge No. 128.

Two culverts over two brooks. Bridge No. 129.

Culvert over an irrigation channel. Bridge No. 130.

End of fill.

Fill. Length, 250m.

Station at Vic. Receipt building to the left at the end of the station; telegraph office; tax office; freight shed, 30m. long, before coming to the receipt building; two commercial platforms, one of which is 10m. to the right at the end of the station and the other, to the left, is 81m. x 6m. and is situated between the freight station and the receipt building; 30-ton scales; 6-ton loading crane; stone platform, 150m. x 11m., to the left of the entrance to the station; two 200m. and 250m. sidings to the left. These sidings serve the freight shed and the platform, one of them is double entry and joined to the main tracks, and the other is blind at both ends and joined to the other siding by two switches. One 370m. double-entry siding to the right; locomotive shed to the right at the end of the station, served by a siding joined to the one last mentioned above; 48cu.m. water tank after passing the receipt building. Alt. 207.7m.

ROADS

The roads and highways of this section of France are divided into five classes and are shown on the accompanying map as follows:

(1) *National Roads* (Routes Nationales or R. N.).—Indicated by a double red line and marked R. N. No. 3 for example. The width of the road between ditches is from 10m. to 12m. (33 ft. to 40 ft.). The width of the paved portion is from 5m. to 8m. (16 ft. to 20 ft.) but is generally 5m.

(2) *Department Roads* (Routes Departmentales or Rtes. Deples.).—Indicated by a single heavy red line and marked D. No. 10 or G. C. D. No. 10 for example. The width of the road varies from 8m. to 11m. (26 ft. to 36 ft.) between ditches, but is generally 10m. (33 ft.). The width of the pavement varies from 4m. to 6m. (13 ft. to 20 ft.).

(3) *Roads of Important Communications* (Chemins de Grande Communication, Chins. de Gde. Com.).—Indicated by a single heavy red line and marked G.C. No. 10 for example. Width between ditches, 8m. (26 ft.); width of paving, 4m. to 5m. (13ft. to 16 ft.). For the purpose of this information and accompanying maps, no distinction has been made between No. 2 and No. 3, the only difference seeming to be the width of the paving. Numbers of these roads are the same as the Department Roads from which they are made. Thus: Dept. Road No. 1 (Rte. Deple. No. 1) comes from Chin. de Gde. Com. No. 1 bis.

(4) *Country Roads* (Chemins d'Interet Commun.) and *Local Roads* (Chemins Vicinaux).—Width between ditches, 6m. (20 ft.); width of paving, 3m. to 4m. (10 ft. to 13 ft.). Indicated by a single light red line. On the French maps, by two full lines close together.

5 *Ordinary Roads.*—No account of such roads is given herein. They consist of farm and forest roads and are indicated on the French 1:50,000 map with single lines or double lines, one of which is dotted.

Lorraine

Detailed information regarding the roads of Lorraine is not available. The detail of the size and importance of roads shown on the map is taken from Carte Michelin, an automobile map on a scale of 1:200,000. This set of maps is a continuation of the same map in France, and, in general, it can be assumed that roads of similar designation are similar in character to those in France.

Data on road bridges are also lacking, except when they occur over an important stream, canal or railroad. Bridges on roads shown on the map are so designated as to position on German maps but no data is otherwise available.

Road information on the French section of the quadrangle is as follows:

R. N. No. 74. Chalons-sur-Saone to Saarguemines via Nancy and Moyenvic

Width of roadbed, 10m.-22m.; of macadam, 4m.-14m.

Road enters the quadrangle at Seichamps in southwest corner.

For preceding section, see Nancy Northeast.

Grade of 5.7 per cent for 100m. at Seichamps.

Grade of 5 per cent for 60m. near Seichamps. (Hill of Haie Serling.)

Grade of 6 per cent for 100m. near Seichamps. Between 43.950km. and 44.050km.

Laneuvelotte. Km. 45.490. Culvert over rau. de Noirinncourt. Length, 12.40m.; width, 6.3m. between sidewalks. Bridge No. 160.

Grade of 5.6 per cent for 860m. near Laneuvelotte. (Hill of Castille.)

Farm La Bouzule. Km. 47.8. Masonry culvert over a gully. Width, 10m. between parapets. Bridge No.161.

Grade of 5.7 per cent for 140m. in Champenoux and a sharp turn.

Champenoux. Masonry skew bridge over rau. Amezule; one 3m. arch. Length, 5m.; width, 11m. Bridge No. 162.

Grade of 6.5 per cent for 250m. near Mazerulles. (Hill des Perlots.)

Mazerulles. Masonry culvert over rau. Mazerulles or Brin, one 3.8m. arch. Length, 12.5m.; width, 8.2m. Bridge No. 163.

Grade of 6.2 per cent for 50m. at Mazerulles.

Grade of 5.4 per cent for 550m. near Moncel-sur-Seille. (Hill des Hut de Bois.)

Grade of 5.2 per cent for 140m., and of 5 per cent for 120m. at Moncel-sur-Seille.

Moncel-sur-Seille. Masonry bridge over the Loutre Noire; one span. Length, 11.2m.; width, 8.6m. Bridge No. 164.

Grade of 8 per cent to 11 per cent for 120m. at the exit from Moncel-sur-Seille. Hill of Calvaire.
Grade of 0.7 per cent to 10 per cent for 120m. near Moncel-sur-Seille. Hill of Fours a Chaux (lime furnaces).
Grades of 6.8 per cent for 60m. Hill of Bas de Bois, and of 6 per cent to 9 per cent for 390m. near the frontier.
Crosses border into Lorraine (Germany).
Road continues, passing Vic, Moyenvic, Marshal and Mulcey.

DEPARTMENT ROAD NO. 7. LUNEVILLE TO MOYENVIC

Width of roadbed, 9m.-14m.; macadam, 4m.-8m.
For preceding section, see Luneville N.W.
Enters quadrangle 2km. south of Arracourt.
Grade of 6.3 per cent between km. 13 and km. 14 approaching Arracourt.
Grade of 6 per cent between km. 14 and km. 14.6.
Grade of 6.8 per cent between km. 18.6 and km. 19.
One kilometer above Arracourt. Masonry bridge over head race of old mill on the Loutre Noire; one span. Length, 3.5m.; width, 9m. Bridge No. 166.
Road ends at Moyenvic.

DEPARTMENT ROAD NO. 14. NANCY TO METZ VIA NOMENY

Width of roadbed, 8m.-11m.; macadam, 4m.
For preceding section, see Commercy S.E.
Road enters the quadrangle near Bouxieres-aux-Chenes.
Bouxieres-aux-Chenes. Masonry culvert over the rau. Gansey. Length, 5.8m.; width, 14.7m. Bridge No. 167.
Grade of 3 per cent to 5 per cent from km. 10.7 to km. 11.04.
Leyr. At km. 13.570. Masonry culvert over the rau. Molmey. Length, 5m.; width, 7.5m. Bridge No. 168.
One and one-half kilometers north of Leyr. Masonry culvert over the rau. de Chanterein. Width, 8m. Bridge No. 169.
Arraye et Han. Km. 17.064. Masonry bridge. Length, 5m.; width, 8.35m. Bridge No. 170.
Chenicourt. Bridge over rau. Chenicourt. Abutments in masonry. Length, 5m.; width, 12.8m. Bridge No. 171.
Grade of 5.5 per cent for 120m. in the neighborhood of Henicourt. Hill Haute des Chy.
Grade of 6 per cent for 208m. in km. 22. Hill of the Forest of Aulnoy.
For succeeding section of the road, see Commercy S.E.

I.C. NO. 3. NANCY TO LANFROICOURT AND THE FRONTIER

Width of roadbed, 7m.-9m.; macadam, 4m.-8m.
For preceding section, see Commercy S.E.
Road enters the quadrangle at Bouxieres-aux-Chenes.
Grade of 5 per cent for 45m. in km. 10.2 km. north of Bouxieres.
Grade of 5 per cent for 62m. in km. 12.
Lanfroicourt 1½km. north of International Bridge over the Seille. Masonry; four spans. Length, 37m.; width, 4.5m. Bridge No. 172.

I. C. NO. 3. BRANCH NO. 1. AGINCOURT TO BOUXIERES-AUX-CHENES

Width of roadbed, 6m.-10m.; macadam, 4m.
For preceding section, see Commercy S.E.
Road enters the quadrangle at Dommartin-sous-Amance.
Dommartin-sous-Amance. Metal bridge with masonry abutments over the rau. Amezule. Length, 7.6m.; width, 5.3m. Bridge No. 173.
Bridge over the rau. Gensey. Metal with masonry abutments. Length, 3.0m.; width, 6.0m. Bridge No. 174.
Bridge over the rau. Gensey, called Petit Moulin. Metal with masonry abutments. Length, 8m.; width, 6m. Bridge No. 175.
Grade of 6 per cent for 40m. and grade of 6.7 per cent for 60m. Hill of Dommartin-sous-Mance.
Grade of 6 per cent for 200m. Hill of Laitre-sous-Amance, neighborhood of Amance.

Hill of Mance, nearing Laitre with these grades:
6.0 per cent for 100m.
9.6 per cent for 100m.
11.7 per cent for 92m.
11.5 per cent for 148m.
6.0 per cent for 60m.
12.0 per cent for 200m.
9.0 per cent for 73m.

Hill of Mance, nearing Bouxieres-aux-Chenes with these grades:
7.0 per cent for 100m.
9.0 per cent for 20m.
12.0 per cent for 30m.
9.0 per cent for 100m.
8.8 per cent for 100m.
11.0 per cent for 100m.

Between km. 5 and km. 5.497, grades of 10 per cent for 100m. and of 8 per cent for 100m., of 10 per cent for 194m. and of 8 per cent for 103m.

Bouxieres-aux-Chenes. Masonry culvert over the rau. Gensey. Length, 2.4m.; width, 6.4m. Bridge No. 176.

I.C. No. 4. Nomeny to Letricourt and the Frontier via Aboucourt (Commercy N.E.)

Width of roadbed, 7m.-12m.; width of the macadam, 3m.-6m.

For preceding section, see Commercy N. E.

Road enters the quadrangle in the N. W. corner.

Grade of 6.7 per cent for 49m. between Aboucourt and Letricourt.

Grade of 6.5 per cent for 141m. between Aboucourt and Letricourt.

Bridge. Stream not given. Metal with masonry abutments; length, 4m.; width 5.8m. Bridge No. 177.

Grade of 10 per cent for 15m. coming to Letricourt.

Grade of 5.1 per cent for 80m. coming to Letricourt.

Grade of 6 per cent for 80m. in Letricourt.

Grade of 5.8 per cent for 50m. between Letricourt and the frontier.

Average grade of 6.3 per cent for 225m. (max. 9.2 for 25m.) and a sharp turn in the last part at the junction of branch No. 6.

Kilometer 8.440 at Aulnoise. Flood bridge over the Seille overflowed lands. Metal with masonry pier and abutments. Bridge No. 178.

Aulnoise. International bridge over the Seille. Masonry; four spans; length, 41.3m.; width, 4.45m. Bridge No. 179.

End of road.

I. C. No. 7.

Width of roadbed, 6m.-10m.; macadam 3m.-7m.

Road enters the quadrangle south of Erbeviller and follows the valley of the Seille.

For preceding section, see Luneville N. W.

Grade of 6 per cent for 160m. near Erbeviller.

Grade of 6 to 7.8 per cent for 220m. between Remerville and Erbeviller. Hill of the Tuilerie.

Grade of 6.1 per cent for 120m. crossing Erbeviller.

Grade of 5 per cent for 140m. leaving Erbeviller.

Champenoux. Masonry culvert over the rau. Amezule; length, 7m.; width, 5m. between sidewalks. Bridge No. 180.

Grade of 6.8 per cent for 200m. nearing Champenoux.

Grade of 7.2 per cent for 240m. nearing Champenoux.

One kilometer northwest of Mazerulles. Bridge over the rau. Mazerulles. Bridge No. 181.

Station at Brin. Bridge over the rau. Mazerulles. No data. Bridge No. 182.

Grade of 8 to 10 per cent for 400m. nearing Brin-sur-Seille. Hill of Fours-aux-Chaux.

Brin. Metal culvert over rau. St. Jean Fontaine. Masonry abutments; length, 4.5m.; width, 7m. Bridge No. 183.

Grade of 5.2 per cent for 280m. nearing Brin.

Grade of 5.3 per cent for 65m. and of 6.2 per cent for 98m. between Brin and Bey.

Grade of 6.1 per cent for 87m. between Brin and Bey. Hill of Pierrailles.
Grade of 5 per cent for 100m. between Brin and Bey. Descent of Vaux.
Bey. Metal bridge with masonry abutments over rau. Poncey or Rupt de Voidoncourt; length, 9m.; width, 7.5m. Bridge No. 184.
Grade of 6.4 per cent for 245m. nearing Lanfroicourt. Hill of Corves.
Grade of 6 per cent for 28m. nearing Lanfroicourt. Hill of the Tuilerie.
Grade of 5 per cent for 102m. between Lanfroicourt and Armancourt. Hill of Ruell-des-Loups.
Grade of 6.1 per cent for 152m. between Lanfroicourt and Armacourt. Hill of Raulet.
East of Armaucourt. Masonry bridge over the rau. Saubrupt; length, 6m.; width, 7.6m. Bridge No. 185.
North of Armaucourt. Metal skew bridge over the rau. Chanterein; length, 9.0m.; width, 7.2m. Bridge No. 186.
Grade of 8.8 per cent for 100m. between Armaucourt and Arraye. Hill of Gotteau.
Arraye et Han. Masonry culvert over rau. de Brouillard; length, 7m.; width, 7m. Bridge No. 187.
Grade of 6 per cent for 51m. between Arraye and Jeandelincourt.
Arraye et Han. Masonry culvert at kilometer 24.579. Stream not named. Length 5m.; width, 7.2m. Bridge No. 188.
West of Arraye. Masonry bridge over the rau. Cul des Rupts; length, 4m.; width, 3m. Bridge No. 189.
For succeeding section, see Commercy S. E.

I. C. No. 7. Branch No. 1. To the Station of La Bouzule

Width of roadbed, 6m.-7m.; macadam, 4m.
Two kilometers west of Champenoux. Masonry bridge over rau. Amezule. One span; length, 8m.; width, 4.5m. Bridge No. 190.

I. C. No. 8. Boucq to Moncel-sur-Seille, via Toul, Richardmenil and Saint Nicholas

Width of roadbed, 7m.-20m.; macadam, 4m.-6m.
Road enters quadrangle south of Erbeviller.
For preceding section, see Luneville N. W.
Erbeviller. Masonry culvert over rau. Amezule. Length, 2.5m.; width, 8m. Bridge No. 191.
Grades of 6.2 per cent for 330m. (hill of Narefeux); and of 6 per cent for 150m. nearing Sorneville.
Grade of 8.5 per cent for 180m. nearing Sorneville.
Grade of 8.2 per cent for 350m. nearing Moncel-sur-Seille. Hill of Morlotte.
Moncel-sur-Seille. Masonry bridges over rau. Geneva. One span; length, 9.15m.; width, 7.1m. Bridge No. 192.
End of road.

I. C. No. 10. Toul to Leyr via Tremblecourt

Width of roadbed, 6m.-11m.; macadam, 3.25m. to 5m.
For preceding section, see Commercy S. E.
Grade of 6.5 per cent for 61m. near Leyr. Hill of Leyr station.
Leyr. Metal bridge over rau. de Molney. Masonry abutments. Length, 9m.; width, 7m. Bridge No. 193.
Grade of 5 per cent for 37m. crossing Leyr.

I. C. No. 21. Badonviller to Moncel-sur-Seille via Blamont and Arracourt

Width of roadbed, 7m.-10m.; macadam, 3m.-4m.
For preceding section, see Luneville N. W.
Road enters the quadrangle 1½km. south of Richemont-le-Petite.
Grades entering and leaving Richecourt, 6 per cent for 150m. and 250m.
Grades of 6 per cent for 250m. to the right of the farm of Riouville.
550m. after leaving Arracourt. Grade of 6 per cent for 140m.; at 690m., grade of 7 per cent for 100m. Grade of 7 per cent for 110m. entering Bezange-la-Grande.

Two kilometers east of Sorneville. Masonry bridge over rau. des Pres de St. Thiebaut with grade-corps. Length, 7m.; width, 6m. Bridge No. 194.

Grade of 5.3 per cent for 70m. nearing the forest of Sorneville.

Grade of 5 per cent for 90m. nearing the mill of Moncel-sur-Seille and of 8.3 per cent at the mill.

Grade of 7.5 per cent for 90m. nearing Moncel-sur-Seille and of 6 per cent for 30m. leaving the town.

Pettoncourt. International bridge over the Seille. One 20m. reinforced concrete span. Capacity load of 12 tons. Test load 16 tons. Length, 26m.; width, 4.6m. between sidewalks. BridgeNo. 195.

End of road.

TOWNS AND VILLAGES

The following list comprises the names of all the towns and villages in the quadrangle, the location upon a road or roads, the stream, if any, upon which the town is situated, the population and number of houses before the war. There are included the coordinates of the place based upon the French system called the Lambert Quadrilature. The zero of the system lies southwest of France and the coordinates are all plus to the east and north. In this table the easting is given first and the northing second.

Name of Town or Village	Road	Stream	Coord.		Pop.	Houses
Aboncourt		Seille	397	225	101	35
Ajoncourt	D. No. 14. I. C. No. 7.	Seille	390	228	179	50
Alincourt		Seille	398	223	167	44
Amance	I. C. No. 3		393	218	433	175
Amelcourt			409	227	156	44
Armaucourt	I. C. No. 7. I. C. No. 9.	Seille	365	225	332	106
Arraucourt	I. C. No. 21		412	215	667	181
Arraye et Han	D. No. 14. I. C. No. 7.	Seille	394	228	489	138
Athienville			409	214	301	90
Attilloncourt		Seille	401	227	109	36
Aulnois-sur-Seille		Seille	396	231	327	98
Battlemont			419	224	...	...
Bey	I. C. No. 7	Seille	398	224	167	69
Bezange-la-Grande		Loutre Noire	407	217	400	110
Bezange-la-Petite			418	215	229	63
Bioncourt		Seille	399	223	338	95
Blanche-Eglise		Seille	422	222	153	29
Brin		Seille	399	221	435	127
Bouxieres-aux-Chenes	D. No. 14. I. C. No. 3.		392	220	918	256
Burlioncourt			415	230	332	90
Chambrey		Seille	407	222	759	156
Champenoux	I. C. No. 7		398	217	499	141
Chateau Salins		Amezule	410	226	2217	368
Chateau Voue		Banvoie	418	229	171	50
Chenicourt	D. No. 14		394	230	208	63
Coutures			408	225	207	52
Craincourt			396	232	373	102
Dedeling			418	229	77	21
Delme		Etg. St. Jean	402	233	643	167
Dommartin-sous-Amance	I. C. No. 3	Amezule	391	217	140	36
Donnelay			423	218	517	122
Donjeux			402	232	134	37
Erbeviller			401	215	85	28
Faxe			407	233	...	...
Fonteny			407	232	405	120
Fossieux		Seille	397	229	204	48
Fresnes-en-Saulnois		Etg. St. Jean	405	228	357	117
Gerbecourt			402	223	145	46
Gremecey			411	229	212	66
Hampont		Petit Seille	415	227	348	94
Harraucourt-sur-Seille			417	223	327	79
Jallaucourt			401	228	367	102
Juvelize			420	219	280	65
Juvrecourt			414	217	96	56

Name of Town or Village	Road	Stream	Coord.	Pop.	Houses
Laitre-sous-Amance	I. C. No. 3		392 218	307	73
Laneuveville-en-Saulnois			405 231	389	95
Lanfroicourt	I. C. No. 3	Seille	397 225	271	80
Laneuvelotte	R. N. No. 74		394 215	211	58
Letricourt	I. C. No. 4	Seille	394 232	348	88
Lemoncourt			402 231	136	40
Ley		Saline	421 216	214	58
Leyr	I. C. No. 9		392 224	779	191
Lezey		Saline	419 218	219	49
Lubecourt			411 228	153	40
Malaucourt		Osson	399 228	242	68
Mahoue		Seille	398 226	244	70
Marsal		Seille	417 222	564	148
Mazarulles	I. C. No. 7	Mazerulles	400 219	256	87
Moncel-sur-Seille		Loutre Noire	404 219	715	174
Moncourt			419 214	203	46
Morville-les-Vic			413 225	323	88
Moyen-Vic		Seille	404 221	613	178
Mulcey		Seille	412 223	383	92
Obreck		Petit Seille	416 228	154	36
Ommeray			423 214	295	71
Oriocourt		Etg. St. Jean	403 230	157	29
Pettoncourt		Seille	402 221	234	60
Puttigny			413 229	213	55
Rechicourt-la-Petite	I. C. No. 21		415 214	147	42
Salonne			409 222	...	...
Seichamps	R. N. No. 74		392 214	379	108
Soixeling			419 230	...	...
Sorneville	I. C. No. 8		403 217	411	135
St. Medard			419 224	257	67
Vannecourt			413 232	266	76
Vaxy			412 229	315	90
Vic		Seille	411 221	1933	444
Viviers			405 233	192	53
Wuisse			420 229	203	45

SARREBOURG SOUTH-WEST

DATA ON BRIDGES

In the following list of bridges, the enumeration has been based upon the idea of designating a bridge in three ways, as follows; (a), as being over an important stream, road, or railroad; (b), as being on a railroad; (c), as being on a highway or road. In this list the bridges on important streams are given first, then follow those upon railroads, and finally those upon roads are given in the order of their importance. This results in a bridge being noted twice and sometimes three times. Where such duplication of record occurs, reference is made to the preceeding item number for the same bridge. Bridges are designated in the list by item numbers. All dimensions are given in meters.

ITEM	INDEX NO. ON MAP	ROUTE. Road, Railroad, Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
1		Down the Valley of the Seille	Road to Blanche Eglise	Mulcey	Old Seille					Timber Passerelle
2		"	"	"	Seille					" "
3		"	"	"	Videlingerback					" "
4		"	Road to Bourrache	St. Medard	Seille	1-10.0				Timber and Iron
5		"	At a dam on the River	S.E. of Marsal	"					With passerelle 1 pier and 2 abuts for needle dam
6		"	Road to Blanche Eglise, or Weisskirchen	Marsal	"	2-6.0				Metal. Masonry piers and abuts
7		"	Road to the Meadows	"	"					Metal
8		"	Road to Harrancourt	"	Arm of the Seille	1-10.0				"
9		"	Road to Maison-Blanche	"	Seille	3-3.0				Masonry. Piers with semi circular cutwaters
10		"	Road from Marsal to the Road, Dieuze-Vic	"	"	3	15.0			Masonry
11		"	Road to Juvelize	"	"					Metal
12		"	"	"	"					"
13		"	R.N. #74. Nancy-Sarrebourg	Moyenvic	"	1-15.0				SAME AS #165 Masonry
14		"	Local Road	Moyenvic at la Saline	"					Passerelle

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ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				Sarrebourg S.W BRIDGES #2
				NEAREST TOWN	OVER	PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
15		Down the Valley of the Seille	400m. above town	Vic	Seille					Passerelle
16		"	Streets	"	"	1-12.0		6.0		Metal. PONT DES MOULINS
17		"	"	"	"	1-12.0		6.0		Metal PONT DES BOUCHERS
18		"	Road to Chateau-Salins	"	"	3-4.0		8.0		Masonry. Semicircular Cutwaters
19		"	Below the town	"	"	1-10.0				Metal. Location not definite
20		"	R.R. Nancy-Saaralben	Salonnes	"	2-9.0				SAME AS #119 Width of pier 1.2 m. Clearance 3.3m 70° Metal Skew. Masonry pier and abuts.
21		"	Footpath	Chateau N.E. of Burthecourt	"	1-14.0				Iron Passerelle
22		"	Road. Nancy-Chateau-Salins	Burthecourt	"	3-6.0		8.0		Masonry. Semicircular cutwaters
23		"		Chambrey	"	1-10.0				Location not definite. Metal and Concrete. Masonry abut.
24		"	Road to R.R. Station	"	"	1-14.0		3.0		Metal
25		"	Road to Moncel	Pettoncourt	"	1-20.0	26.0		4.6	SAME AS #195 Max Load 12 tons. Test, 16 tons. Reinforced Concrete. International.
26		"	Road to Bioncourt	Brin	"	2	31.0		3.0	Metal. International
27		"	Road to Forest of Champenoux	Bioncourt	Arm of the Seille	2	14.0	3.0		Timber. Masonry Pier. Frenchside
28		"	"	"	Seille			3.0		Metal
29		"	"	"	Mill Canal			3.0		Timber Masonry Piers
30		"	Road to Alincourt	Bey	Seille		25.0	0.5		Passerelle
31		"	Road to Aboncourt	Lanfroicourt (France)			15.5	1.5		Passerelle Timber over small arm Metal over large arm.
32		"	Road. Nancy-Delme	Manhoué	"	4	37.0		4.5	SAME AS #172 Masonry
33		"	At mill of Chamville	North of Armaucourt	" (France)					Dam and Passerelle
34		"	Road to Malaucourt	Han (France)	"	3	15.0	3.0		Timber. Masonry abut
35		"		Below Han	"			0.4		2 Passerelles

ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE NEAREST TOWN	SITE OF BRIDGE OVER	DETAILS OF BRIDGE PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	Sarrebourg S.W. BRIDGES #3
36		Down the Valley of the Seille	Road to Arraye	Ajoncourt	Seille	2	40.3		2.5	Metal. Masonry Piers and Abuts	
37		"	Road to Pont-à-Mousson	Aulnoise-sur-Seille	" (Flood)	4	24.0	4.0		Metal. Masonry Piers and Abuts	
38		"	" (I.C. #4)	"	"	4-8.68	41.3	4.4		SAME AS #179 Masonry	
39		"	" (France) (I.C. #4)	" (France)	" (Flood)		24.0	5.0		SAME AS #178 Metal	
40		"	Road to Chateau	"	"		14.0	2.2		Metal Passerelle. Masonry piers and abuts.	
41		"	Road. Létricourt — Thezey-St-Martin	Thezey-St-Martin north of Letricourt	"		27.0	2.5		Metal skew. Masonry abut.	
42		Down the Petit Seille	Road to Haboudange	Burlincourt	Petit Seille		8.0	3.5		Metal. Masonry Abut.	
43		"	Road Chateau-Salins to Morhange	Hampont	" "	2-3.0	9.0	4.5		Masonry	
44		"	Road to Chateau-Salins	Puttigny.	" "					No data	
45		"	Road. Metz-Saarbourg.	Chateau. Salins	" "		6.0	7.0		Masonry. Also a culvert over old channel	
46		"		" "	Mill Canal		5.0	7.0		Timber. Masonry abut	
47		"	Road to R.R. Station	" "	Petit Seille					Metal	
48		"		" "	" "		13.2			Not definite	
49		"	Road to Vic	Salonnes	" "					No data	
50		"	Local Road	"	" "					No data	
51		Down the Rau. Amezule	I.C. #8. Boucq to Moncel	Erbeviller	Rau. Amezule	1	2.5	8.0		SAME AS #191 Masonry	
52	(Coords) 395-215B	"	I.C. #7. Luneville-Pont-à-Mousson	Champenoux	"	1	3.0		5.0	SAME AS #180 Masonry	
53	398-216A	"	R.N. #74. Chalons sur-Soane to Saarguemines	"	"	1-4.0	4.0	11.0		SAME AS #162 Masonry Skew	
54	395-216D	"	I.C. #7. Road to Bozoule Sta.	Amance	"	4-0.90	8.0	4.5		SAME AS #190 Masonry	
55	393-216A	"	R.N. #74. Chalons to Saarguemines I.C. #7. R.R. Station New R.R. Road to Lanauvelotte	Lanauvelotte " Laitre-sous-Amance	Gully R. Rau. Amezule "	2-6.35 3-7.30	3-20 1.50 3.0	5.0		Timber Masonry	
56	393-216B 393-216C	" " "	Road to Lanauvelotte New R.R. Road, Laitre-sous-Amance	" " Laitre-sous-Amance	" " "	3-3.50 1-7.0	1150 T.O 15.0	6.6		Timber " + steel)	

ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					Sarrebourg - S.W. BRIDGES - #4
				NEAREST TOWN	OVER	PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	
57		Down the Rau Amezule	I.C.#3. Agincourt - Bouxieres-aux-Chenes	Dommartin-sous-Amance	Rau. Amezule		7.6	5.3		SAME AS #173 PONT DE MONTHEUX. Metal. Masonry Piers	
58		Down the Rau Loitre-Noire	Above the Mill	Rechicourt-la-Petite	Rau. Loitre-Noire		1.0	4.0		Masonry	
59		"	Below the Mill	" " "	" "		1.5	4.0		"	
60		"	Road to Bezange-la-Grande	" " "	" "	1-0.6	7.0			"	
61		"	I.C. #21. Road to Rechicourt	Juvrecourt	Tail Race of Mill	2-0.8	5.4	6.8		"	
62		"	Local Road	"	" " " "		1.5	7.0		"	
63		"	Road to Farm, Haute Riouville	"	Rau. Loitre-Noire	1	3.0	5.3		Timber. Masonry abut.	
64		"	D #7	Arracourt	Head Race of Mill	1	3.5	9.0		SAME AS #166. Masonry	
65		"		"	Tail Race of Mill	1	4.0	9.0			
66		"	Local Road	100 m. below mill of Arracourt	Rau. Loitre Noire	1	4.0	4.5		Timber. Masonry abut.	
67		"	Village Street	Bezange-la-Grande	" "	1	8.0	0.65		Timber Passerelle. Masonry abut.	
68		"	I.C. #21. Branch #11	"	" "	1	11.0	6.5		Metal. Masonry abut.	
69		"	Village St.	"	" "	1	7.0	0.6		Timber Passerelle. Masonry abut.	
70		"	Footpath	"	Head Race of Mill, St. Marie					Passerelle	
71		"	"	"	400 m. below Mill. Over Loitre Noire					"	
72		"	R.N. #74	Moncel-sur-Seille	Rau. Loitre-Noire	1	11.2	8.6		SAME AS #164 Masonry.	
73		"	Local Road	200 m. below Moncel-sur-Seille	" "	1	15.0	3.0		Timber. Masonry abut.	
74		"	Footpath	600 m. below Moncel-sur-Seille	" "	1	7.0	0.5		Timber Passerelle	
75		"	R.R. Nancy-Chateau-Salins	"	" "	4	20.0	4.5		SAME AS #113 Masonry	
76		Down the Rau. Pres. St. Thibaut	Road. Badonviller to Moncel	2km. East of Sorneville	Rau. Pres. St. Thibaut	2-1.2	7.0	6.0		SAME AS #194 Masonry	
77		Down the Rau. de Geneva.	Road to Mazerulles	"	Rau. de Geneva.	1	4.2	5.2		Masonry.	

ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					SARREBOURG - S.W. BRIDGES - #5
				NEAREST TOWN	OVER	PRIN SPANS.	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	
78		Rau. de Geneva	I.C.#8. Boucq - Moncel	Moncel-sur-Seille	Rau. de Geneva	1	9.15	7.1		SAME AS #192 Masonry	
79		"	Footpath	" - "	"			0.6		Timber Passerelle	
80		Rau. Mazerulles or Brin	Street	Mazerulles	Rau. Mazerulles or Brin	1	5.5	4.6		Metal	
81	Coordinates 399-219 R	Rau. Mazerulles or Brin	Local Road to Brin	"	" "	2	9.0		2.45	Masonry	
82		"	R.N. #74	"	" "	1	12.5	8.2		SAME AS #163 Masonry	
83		"	R.R. Nancy - Saaralben	Near Brin	" "		5.0			SAME AS #112 Masonry	
84		Rau. de Gensey	Road "de la Prarie"	Bouxieres-aux-Chênes	Rau. Gensey		2.45	5.85		Timber. Masonry abut.	
85	Coordinates 391-219A	"	D. #14	" "	"	1-4.0	5.8	14.7		SAME AS #167 Masonry	
86		"	I.C. #3 Branch #1	" "	"	2-0.6	2.4	6.4		SAME AS #176 Masonry	
87		"	Local Road du Battant	" "	"		3.0	6.0		Metal. Masonry abut.	
88	Coordinates 391-216A	"	I.C. #3 Branch #1	Pommartin-sous-Amance	"	1-7.0	8.0	6.0		SAME AS #175 Iron. Brick floor. Masonry abut.	
89	391-216B	"	Local Road du Petit-Moulin	" "	"	2-1.10	5.5	6.0		Masonry	
90		"	R.R. Nancy - Moncel	" "	"	1-1.5	2.7	5.0		SAME AS #110 Masonry	
91	391-216C	"	I.C. #3 Branch #1	" "	"	1	5.0	6.0		SAME AS #174 Metal. Masonry abut.	
92		Rau. Etang de St. Jean	Road, Craincourt - to Pusieux	1 km. N. of Craincourt	Rau. Etang de St. Jean			6.0		Masonry	
93		"	Road, Craincourt to Liocourt	"	"			6.0		Metal	
94		"	Road, Craincourt - to Thezey-St.-Martin	"	"			1.0		Timber Passerelle	
95		Rau d'Osson	Road, Jellaucourt to Bioncourt	1 km. S. of Bioncourt	Rau. d'Osson					No data	
96		"	Road, Jellaucourt to Manhoué	1 km. S.W. of Bioncourt	"					" "	
97		"	Road, Melaucourt to Manhoué	Melaucourt	"					" "	
98		"	Road, Fossieux to Lemoncourt	Fossieux	"					" "	

ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				NOTES	Sarrebourg - S.W.
				NEAREST TOWN	OVER	PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY		BRIDGES - N° 6
99		Rau. d'Osson	Road, Fossieux-Aulnois-sur-Seille	3/4 km. N.W. of Fossieux	Rau. d'Osson					No Data	
100		"	Road, Ajoncourt-Aulnois-sur-Seille	1 km. S. of Aulnois	"					" "	
101		Canal de Flottage des Salines (Salinenfloss canal)	Road, Bourdonnaye to Vic	Donnelay	Canal	1-4.0	17.0	8.0		Masonry	
102		"	Local Road Ley-Geistkirch	Moulinde Romur	"					Timber	
103		"	600m. East	Salins de Ley	"					Timber Passerelle	
104		"	Local Road	" "	"			1.0		Timber Passerelle	
105		"	Road, Lezey-Geistkirch	Lezey	"		5.0			Metal. Masonry abut	
106		"	"	"	Irrigation Canal					No data	
107		"	Road, Xanrey-Marsal	Recourt-Haute	"					" "	
108		"	"	"	Canal					" "	
109		"	Road to the Farm of Moyenvic	Villers-Brettnach		1-10.0				Masonry abut. Metal	
110		R.R. Nancy to Spar-alben via Champigneulles, Moncel and Chateau Salins.	Single Track Standard Gage	Dommartin-Sous-Amance	Rau. Gensey	1-1.8	2.7	5.0		SAME AS #30 Masonry	
111		"	"	Near Station, la Bouzule	Rau.		2.0			Masonry	
112		"	"	Near Brin	Rau. Mazerulles		5.0			SAME AS #83 Masonry	
113		"	"	Near Moncel	Rau Loutre Noire	4	20.0	4.5		SAME AS #75 Masonry	
114		"	"	"	Irrigation Canal		2.0			Masonry	
115		"	"	At Station, Chambrey	Ruisseau					Probably masonry	
116		"	"	"	"					" "	
117		"	"	Near Burthecourt "	Rau de Chateau de Burthecourt					" "	
118		"	"	"	Ruisseau					" "	
9		"		Salonnes	Seille	2-9.0				SAME AS #20 Width of pier 1.2m. Clearance 3.3m 70° Metal Skew. Masonry Piers and Abut.	

		DATE	DESCRIPTION	SITE OF BRIDGE	DETAILS OF BRIDGE	Sarrebourg - S.W.

ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					Sarrebourg – S.W.
				NEAREST TOWN	OVER	PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	BRIDGES - #7
120		R.R. Nancy to Saaralbern via Champigneulles, Moncel and Chateau Salins	Single Track Standard Gage	1½km. S. of Chateau-Salins	Ruisseau					Probably masonry	
121		"	"	Chateau-Salins	Rau. de la Sucrerie		3.0			" "	
122		"	"	" "	Road, Chateau-Salins to Vic, over R.R.	1-17.5		8.5		SAME AS #131 Masonry pier and abut. 2 Plate Girders. L=17.5m. Depth=2.1m. Width 8.3m.	
123		"	"	1½km. N. of Chateau-Salins	Rau. d'Olimpre	1-2.25				Metal	
124		"	"	3km. N.E. of Chateau-Salins	Over two Ruisseaux					2 culverts. Probably masonry.	
125		"	"	S. of Puttigny	Road, Medival to La Gaite, over RR						
125A		"	"	Near Hampont	Ruisseau					No data. Probably masonry.	
126		"	"	"	Rau. Flotte-Graben or Banvoie	1				Masonry.	
127		R.R. Buthecourt to Vic	"	Between Buthecourt and Vic	Ruisseau					Probably Masonry	
128		"	"	"	Irrigating Ditch					" " Not definitly located.	
129		"	"	"	Two Ruisseaux					2 culverts	
130		"	"	"	Irrigating Ditch					Probably Masonry. Not definitely located	
131		R.R. Chateau-Salins to Metz	"	Chateau Salins	Road, Chateau-Salins to Vic, over R.R	1-17.5		8.5		SAME AS #122 Masonry pier and abut. 2 Plate Girders. L=17.5m. Depth=2.1m. Width 8.3m	
132		"	"	" "	over Muhlenback E. arm of Petit-Seille	1-16.3				Masonry abut. 2 Sidewalks Peck Plate Girder Skew. Spaced 4.1m. Depth 1.5m	
133		"	"	" "	W. arm of Petit-Seille	1-22.75				Depth 3. m. Spaced 5m Masonry abut. Normal opening 15m. 2 skew (45°) American lattice trusses. L=22.75m.	
134		"	"	" "	Ruisseau	1				Metal	
135		"	"	N. of Chateau-Salins	Ruisseau. Same as above	1				"	
136		"	"	" "	Local Road to Chateau-Salins meadow	1-4.5	5.2			Masonry abut. 2 sidewalks Plate Girders. Depth 2.06m.	
137		"	"	Amelcourt	Rau. Muhlenbach					No data	
138		"	"	West of Amelcourt	Ruisseau					" "	
139		"	"	" "	Rau. Muhlenbach	1-20	2.6			Metal bridge on curve of 300m. radius Plate Girders. Masonry abut. 2 sidewalks.	

INDEX	POINTS	DESCRIPTION	SITE OF BRIDGE	DETAILS OF BRIDGE	Farnham: SW

ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE NEAREST TOWN	SITE OF BRIDGE OVER	DETAILS OF BRIDGE PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	Sarrebourg - S.W. BRIDGES - # 8
140		R.R. Chateau-Salins to Metz	SINGLE TRACK STANDARD GAGE	S.W. of Amelcourt at km 54.325	over road, Chateau-Salins-Metz	1-11.0	12.0			2 Sidewalks. Depth 1.2 m. 56°20' Plate Girder Skew. Masonry abut and wing walls	
141		"	"	" at km. 53.745	over local road and Ruisseau	1-4.5	5.5			Masonry abut. 2 Sidewalks Plate Girders. L.=5.5m. Depth = 0.55m.	
142		"	"	" at km. 53.495	over Local Road	1-4.5	5.5			Masonry abut. 2 Sidewalks. Plate Girders. L=5.5m. Depth = 0.56m.	
143		"	"	Near Coutoures	Road to the Haudrement Farm	1				Masonry Arch	
144		"	"	N.W. of Coutoures	over Local Road	1				Masonry	
145		"	"	"	" "					Probably Masonry	
146		"	"	West of Coutoures at. km 51.132	" "	1-5.0	5.7			Masonry abut. 2 Sidewalks. Plate Girders. L=5.7m. Depth = 2.12 m.	
147		"	"	"	Old Road, Koenigen Weg, or La Reine, over RR	1				Masonry	
148		"	"	North of Fresnes-en-Saulnois	Road to la Neuville-en-Saulnois, over RR.					Metal	
149		"	"	Donjeux	over Irrigation ditch					Probably Masonry	
150		"	"	"	Road to the Road from Metz-Strasbourg, over RR	1				Masonry arch	
151		"	"	"	Rau. St. Johann-Bach					No data	
152		"	"	Delme	over Road to St. Johann-Bach meadows	1				Metal	
153		"	"	"	Rau. St. Johann-Bach.	1				Metal	
154		"	"	" at km. 40.780	over Road to St. Johann-Bach Meadows	1-5.29	6.05			Masonry abut. 2 Sidewalks Plate Girders. L=6.05. Depth = 0.66m	
155		"	"	at km. 40.17	Local Road over Railroad					No data	
156		"	"	about km. 39.7	Flood Culvert					Culvert	
157		"	"		Ruisseau.					Not located	
158		"	"	at km. 39.1	over road connecting 2 side roads	1				Metal	
159		"	"	West of Puzieux	Road to Alaincourt, over R.R.					No data	
60	R.N. 74	Chalons-sur-Saone to Saarguemines	Coordinates 394-215 A	La neuvelotte	Rau. Nairincourt		3.90	6.3		Masonry Culvert.	

No.	Index No. on Index Map	Route — Concession, Lot, Road, Railway or Canal	Description — Name of Stream, Railway or Canal Crossed	Site of Bridge			Details of Bridge				Remarks
180		Concession E.E.	Crossed over								
181											
182											
183											
184											
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186											
187											
188											
189											
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Sarrebourg - S.W.

ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE NEAREST TOWN	SITE OF BRIDGE OVER	DETAILS OF BRIDGE PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
161	R.N.# 74	Chalons-sur-Saone to Sarreguemines		Farm, la Bouzule	Gully			10.0		Masonry
162	"	"	Coordinates 398-216 A	Champenoux	Rau. Amezule	1-3.0	5.0	11.0		SAME AS # 53 Masonry Skew
163	"	"		Mazerulles	Rau. Mazeruller or Brin	1-3.8	12.5	8.2		SAME AS # 82 Masonry
164	"	"		Moncel-sur-Seille	Rau. Loutre-Noire	1	11.2	8.6		SAME AS # 12 Masonry
165	"	"		Moyenvic	Seille	1-15.0				SAME AS # 13 Masonry.
166	D-7	Luneville - Moyenvic		Near Arracourt	Headrace of Mill of Loitre-Noire	1	3.5	9.0		SAME AS # 64 Masonry
167	D-14	Nancy-Metz via Nomeny		Bouxieres aux Chenes	Rau. Gensey		5.8	14.7		SAME AS # 85 Masonry
168	"	"		Leyr	Rau. Molmey		5.0	7.5		Masonry
169	"	"		1½ km north of Leyr	Rau. de Chantereine			8.0		Masonry Culvert
170	"	"		Arraye et Han	Not given		5.0	8.35		Masonry
171	"	"		Chenicourt	Rau. Chenicourt		5.0	12.8		Masonry.
172	I.C.# 3	Nancy to Lanfroicourt and the Frontier		Lanfroicourt, or Manhoué	Seille	4	37.0		4.5	SAME AS # 32 Masonry.
173	"	Branch. Agincourt to Bouxieres via Amance	Coordinates 391-216 A	Dommartin sous Amance	Rau. Amezule	1-7.0	7.6	5.3		SAME AS # 57 PONT DE MONTHEUX Metal. Masonry piers.
174	"	"	Coordinates 391-216 B	Bouxieres aux Chenes	Rau. Gensey	1-1.1	3.0	6.0		SAME AS # 91 Metal. Masonry abut
175	"	"	Coordinates 391-216 C	"	"	1-5.0	8.0	6.0		SAME AS # 88 Called "du Petit Moulin Iron. Brick Floor. Masonry Abut.
176	"	"		"	"	2-0.6	2.4	6.4		SAME AS # 86 Masonry
177	I.C.# 4	Branch. Nomeny-Aboncourt - Letricourt and the Frontier at Aulnoise		Letricourt	not given		4.0	5.8		Metal. Masonry abut.
178	"	"		Aulnoise	Flood Bridge at Seille		24.0	5.0		SAME AS # 39 Metal. Masonry piers
179	"	"		"	Seille	4	41.3	4.4		SAME AS # 38 Masonry International Bridge
179A	I.C.# 7	Luneville - Pont-à-Mousson	Coordinates 399-215 A	Champenoux	Rau.	1-4.20				SAME AS # 52 Metal
180	I.C.# 7		399-215	Champenoux	Rau. Amezule	1-3.0	7.0		5.0	Masonry
181	"	"	399-219 B	1 km. N.W. of Mazerulles	Rau. Mazerulles	1-4.0				Masonry

ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE: NEAREST TOWN	SITE OF BRIDGE: OVER	DETAILS OF BRIDGE: PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	Sarrebourg-S.W. BRIDGES - #10
182	I.C.#7	Luneville - Pont-à-Mousson		Station of Brin	Rau. de l'Etang					No data	
183	"	"		Brin	Rau. St. Jean Fontaine		4.5	7.0		Metal. Masonry abut	
184	"	"		Bey	Rau. Poncey or Rupt de Veidoncourt		9.0	7.5		" " "	
185	"	"		E. of Armaucourt	Rau. Saubrupt		6.0	7.6		Masonry.	
186	"	"		N. of Armau.court	Rau. Chantereine		9.0	7.2		Metal Skew. Masonry abut.	
187	"	"		Arraye et Han	Rau. du Brouillard		7.0	7.0		Masonry. Location not definite	
188	"	"		Arraye et Han at km 24.579	Not named		5.0	7.2		" " "	
189	"	"		West of Arraye	Rau. Col-des-Rupts		4.0	3.0		" " "	
189A 189B 190	" " "	Branch to station, LaBouzule	Coordinates 395-210 C " " D " " B	2km. W. of Champenoux	Rau Amezule	2-1.35 3-4.50 4-4.00	8.0	4.5		SAME AS #54 Masonry Timber Masonry	
191	I.C.#8	Boucq to Moncel-sur-Seille		Erbeviller	"	1	2.5	8.0		SAME AS #51 Masonry	
192	"	"		Moncel-sur-Seille	Rau. Geneva	1	9.15	7.1		SAME AS #73 Masonry	
193	I.C.#10	Toul to Leyr	Coordinates 391-223A	Leyr	Rau. de Molney	1-4.15	9.0	7.0		Metal. Masonry abut.	
194	I.C.#21	Badonviller to Moncel sur Seille and International Bound.		2km. E. of Serneville	Rau. Pres St. Thibaut	2-1.2	7.0	6.0		SAME AS #76 Masonry	
195	"	"		Pettoncourt	Seille	1-20.0	26.0		4.6	SAME AS #25 International Bridge Reinforced Concrete. Max Load 12 Tons, Test 16 tons	
	Note:	No information	available on road	bridges in Lorraine	except where given	over	streams				

G. H. Q. – A. E. F.
G-2 – GENERAL STAFF
A-3

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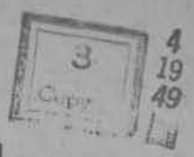

MONOGRAPH
ON
WATERWAYS, ROADS, RAILROADS, AND BRIDGES

[8]

QUADRANGLE
METZ NORTH-EAST

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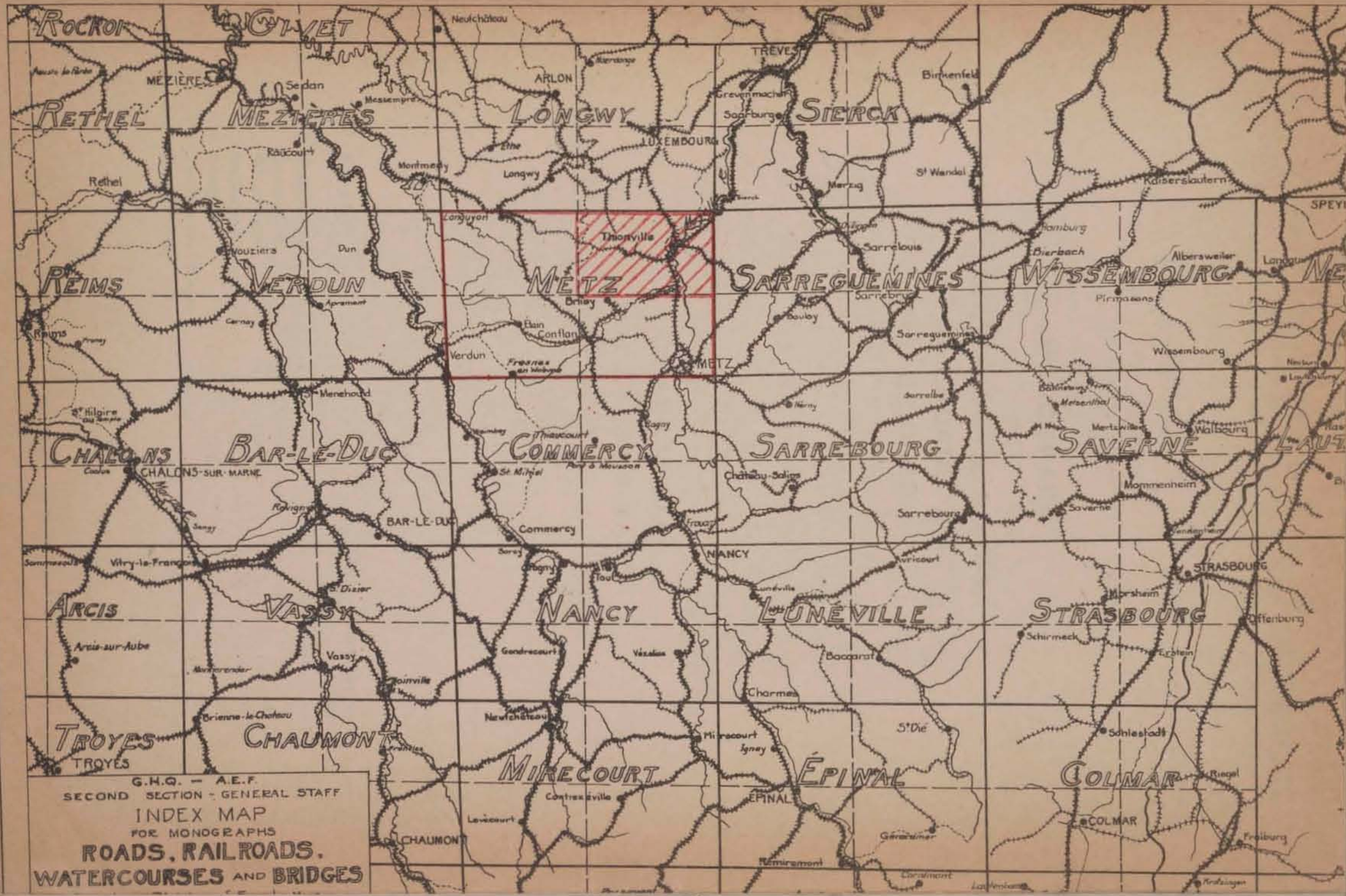
ROCROI
GIVET
RETHEL
MEZIÈRES
LONGWY
SIERCK
REIMS
VERDUN
METZ
SARREGUEMINES
WISSEMBOURG
CHALONS
BAR-LE-DUC
COMMERCY
SARREBOURG
SAVERNE
ARCIS
VASSY
NANCY
LUNÉVILLE
STRASBOURG
TROYES
CHAUMONT
MIRECOURT
ÉPINAL
COLMAR
Neufchâteau
TREVES
ARLON
LUXEMBOURG
Sedan
MEZIÈRES
Rethel
Vouziers
Dun
Thionville
Briey
Verdun
METZ
Sarrelouis
Sarreguemines
Pirmasens
Wissembourg
CHALONS-SUR-MARNE
BAR-LE-DUC
Commercy
St Mihiel
Sarrebourg
Saverne
Vitry-le-François
St Dizier
NANCY
Arcis-sur-Aube
Vassy
Brienne-le-Château
TROYES
Gondrecourt
Vézelise
Baccarat
Charmes
Neufchâteau
Mirecourt
Contrexéville
Lamarche
EPINAL
St Dié
Schirmeck
Erstein
Schlestadt
Rhegel
COLMAR
Offenburg
Freiburg
Remiremont
Gérardmer
Lapoutroie
Kaysersberg
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SECOND SECTION - GENERAL STAFF
INDEX MAP
FOR MONOGRAPHS
ROADS, RAILROADS,
WATERCOURSES AND BRIDGES
G. H. Q. - A. E. F.

G. H. Q. A. E. F.
G-2, General Staff
A-3

MONOGRAPH
ON
WATERWAYS, ROADS, RAILROADS, AND BRIDGES

QUADRANGLE
METZ NORTH-EAST

INDEX

G. H. Q. A. E. F.
G-2 GENERAL STAFF

MONOGRAPH
ON
WATERWAYS—ROADS—RAILROADS—BRIDGES
TO
Accompany Road and Bridge Map

METZ NORTHEAST

EXPLANATION

The information herein contained relates in detail to the following subjects:

WATERWAYS
- Canals
- Rivers
- Important Creeks

RAILROADS
- Main Lines
- Secondary Lines
- Narrow-Gauge Lines

VILLAGES, TOWNS, AND CITIES

ROADS AND HIGHWAYS
- National Roads
- Department Roads
- Communal Roads

BRIDGES
- Highway Bridges
- Railroad Bridges
- Canal and River Bridges

The area covered in this monograph is included in the 1:50,000-scale map of the French government as shown on the index map included herewith and in the sub-division of the monograph. The 1:50,000-scale map is in turn a sub-division of the 1:80,000 and the 1:200,000-scale maps, upon which the various area sheets are named as shown upon the index map. The 1:50,000-scale map of roads and bridges which accompanies the monograph is named as a sub-division of the 1:80,000-scale map. Thus: Metz Northeast.

General information is given as follows for the area in question:

The nature and character of streams, lakes, ponds, etc.;
The character and importance of railroads;
The nature and construction of the roads and connections;
The villages, towns, and cities.

Specific information is given as follows for the area in question:

Size of canals, dimension and number of locks with size and capacity of boats, etc.;
Rivers, their character, size, fords, etc.;
Railroads, number of tracks, clearance, roadbed, grades, cuts and fills, etc.;
Roads, width, grade, width and nature of pavement;
Bridges: location as to stream, railroad, or highway; number of spans, class of construction, width of highway, etc.; photographs where possible.

Bridge information is given as follows:

(*a*) As being over an important stream;
(*b*) As being on a railroad;
(*c*) As being on a highway.

In this way, most bridges appear twice and are cross-indexed. Location of bridges is shown upon maps, and in case of cities, a larger-scale map is given showing bridges.

Strength of Bridges.—No data is available as to the strength of bridges. Railroad structures will probably carry any load coming on them from ordinary traffic. When any load is heavier than engine concentration, the bridge should be examined.

Highway bridges of masonry will probably carry any load up to 12 tons on one axle. Heavier loads should be distributed if the filling of earth over the arch ring is less than 1 ft. deep. No statement can be made as to the strength of metal bridges as they vary as to design and material. As a rule, the older ones were designed for light loads.

SUPPLEMENT

As additional information is obtained, it will be issued as a supplement to this monograph. When using this monograph, always examine the supplement.

SOURCES OF INFORMATION

Maps of the area, either French or German.

Notices of Departments or of foreign regions issued by the *Ministère de la Guerre, Commission de Géographie du Service Géographique de L'Armée.*

Guide books, photographs, etc.

ABBREVIATIONS

Abut., abutment	s. Ml., sur Moselle
C. I., cast iron	M. & M., Meurthe and Moselle
Met., metal	R. N., routes nationales
Mas., masonry	G. C. D., departmental or important road
Timb., timber	I. C., communal or country road
Br., bridge	Riv., river
rau., ruisseau (small stream)	Canl., canal
s. M., sur Meuse	

TABLE OF FRENCH AND GERMAN TERMS WITH ENGLISH EQUIVALENTS

Bois	Woods	Wald
Canal	Canal	Kanal
Canton	District	Gebiet
Chemin	Road	Weg
Chemin de Fer	Railroad	Eisenbahn
Chevaux	Horses	Pferde
Citerne	Tank	Behalter
Commune	Township	Gemeinde
Droit	Right	Recht
Est	East	Ost
Etang	Pond	Teich
Ecluse	Lock	Schleuse
Embranchement	Branch	Abzweigung
Exploitation	Working	Arbeit
Ferme	Farm	Hof
Fleuve	River	Fluss
Gauche	Left	Links
Génie	Engineer (military)	Pioneer
Grande Communication	Main Communication	Hauptverbindung
Gué	Ford	Furt
Hauteur	Height	Hoehe
Kilogramme	Kilogram	Kilogram
Kilomètre	Kilometer	Kilometer
Longeur	Length	Laenge
Largeur	Width	Breite
Mètre	Meter	Meter
Mont	Hill	Hügel
Maison	House	Haus
Nord	North	Nord
Ouest	West	West
Overture	Opening	Oeffnung
Pont	Bridge	Bruecke
Passage Inférieur	Under-Grade Crossing	Weg unter den Eisenbahn Linien
Passage a Niveau	Grade Crossing	Bahnkreuzung
Passage Supérieur	Over-Grade Crossing	Weg ueber den Eisenbahn Linien
Ruisseau	Brook	Bach
Rivière	Creek	Strom
Sud	South	Sud
Source	Spring	Quelle
Voiture à 2 Roues	2-Wheeled Wagon	Waggon mit 2 Raedern
Voiture à 4 Roues	4-Wheeled Wagon	Waggon mit 4 Raedern

DESCRIPTION

One of the main features of the quadrangle is the Moselle River, which enters near the town of Mondelange on the south, runs north and a little west to Thionville and thence northeast, and leaves at Malling in the extreme northeast corner. With the exception of the Moselle Valley and a few other small areas, the quadrangle is hilly and is covered with forests. In the western half, which is the northeasterly portion of the Woevre plain, are located numerous mines (iron), the principal localities for this industry being Batzendal, Metzange and Hayange. France-Lorraine line, running north and south, divides the area into two parts, with about one-fourth of the extreme western portion in France and the remaining three-fourths in Lorraine. To the east and south of the Moselle the hills vary from 12m to 90m (36 ft. to 294 ft.) in height above the valley, while to the west and north they reach a height of 234m (927 ft.).

WATERWAYS

The Moselle

In this quadrangle the Moselle flows north to the central point of Thionville, where it turns northeast and continues in that direction to the northeast corner. It flows in a valley varying in width from 2km to 8km between the hills that slope up gently on either side.

An idea of the stream width can be gained by the bridge lengths at the following localities:

Blettange	168m	549 ft.
Thionville	145m	474 ft.
Thionville	127m	415 ft.
Thionville	145m	474 ft.
Malling	123 ft.	402 ft.

The course of the stream in its valley changes quite frequently from side to side. The stream bed is formed of sand, gravel and boulders. The discharge of the stream varies between wide limits of low and high water. No record is available of the flow in this quadrangle, but the record for Metz in the adjoining quadrangle furnishes a good guide, since the affluents for the intervening distance are very small. The discharge of the river at Metz is 700 cu. ft. per second at low water and at high water 17,500 cu. ft. per second, or 25 times the volume at low-water mark. Low water occurs during the hot months, June, July and August, and it rises again with the autumn rains. High water occurs from December to March. The large ponds located in the quadrangle up stream from this form reservoirs to regulate the flow and thus prevent any very sudden rise and fall.

Structures, etc., on the stream:

Guenange (right of stream). Boat downstream from the confluence of the Orne.

Uckange (left of stream). Steam ferry. Commercial port, 3,500 sq. m. in area. Ford perpendicular to course of stream; depth, 0.8m to 1m (2.6 ft. to 3.2 ft); width, 50m to 60m (164 ft. to 196 ft.). When bridge at Thionville is locked, the water level is raised and the ford is submerged 1.03m (3.4 ft.) at low water and 1.79m (5.9 ft.) at average stage.

Port of Hayange (left of stream). Downstream from the confluence of the rau. Kribsbach and an old channel of the rau. Fensch, commercial port; 5,600 sq. m. in area, with a wharf 230m (752 ft.)in length, of which 50m (164 ft.) is elevated along the railroad.

Beauregard (left of stream). A wall protects the exit from the bridge on right of stream.

Thionville (left of stream). Low water level, 147.28m; depth at low water, 1.08m (3.5 ft.); mean, 1.85m (6.1 ft.), and high water, 3.3m (10.8 ft.). Block-house is located on the left of stream, 4.29m (14 ft.) above high water. To the right the road is protected by a canal, 500m long (1,640 ft.), 10m wide (32.7 ft.) and 3m (9.8 ft.) deep.

Basse-Yutz. Boat.

Haute-Yutz. Boat. Ford below the dam of Haute-Ham with depth at average stage of 0.8m (2.6 ft.). Depth at confluence of rau. Bibiche, 10m (32.7 ft.); boat crossing.

Cattenom (left of stream). Trail ferry for vehicles, road Cattenom to Koenigsmacher, 80m below the confluence of rau. Canner. Average depth of water, 1m to 1.2m (3.3 ft. to 3.9 ft.); below this point there is great variation in depth.

Malling. For bridge over Moselle, see bridge data.

The bridges are noted under that heading.

RAU. BIBICHE

The stream rises in the southeast corner of the quadrangle and flows north into the Moselle at Basse-Ham. It has a length of 22km, width at Basse-Ham is 4m and a depth of 1.3m. Average width is 1.5m to 3m and average depth is 1m to 2m. There are fords at Luttange and Valmstroff. Runs through marshy country between Valmestroff and Kunzig. The bridges are listed under that heading.

RAU. CANNER

The stream rises a short distance east of the line between this and quadrangle Sarreguemines Northwest and has a length of 27km. Crossing the line near Inglange, it flows northwest and into the Moselle at Koenigsmacker, where its width is 6.5m (20 ft.) and depth 1.2m (4 ft.). For most of its length banks are steep and wooded, but near Koenigsmacker gets into a marshy section. Ford at mill below Inglange. At 10m below Koenigsmacker there is a mill dam. The bridges are listed under that heading.

THE RIVER ORNE

This stream flows into the Moselle at a point about 4km north of the south line of quadrangle. At Grandrange the ford has a paved roadway, 3m (10 ft.) in width. Depth of

water, from 0.2m to .5m (.6 ft. to 1.6 ft.). For a general description of stream, see waterways of Metz Southeast. The bridges are listed under that heading.

RAU. FENSCH

The stream rises near the line between France and Lorraine, in the vicinity of Fontoy. It flows east past Hayange, Florange and into the Moselle by way of two branches at Daspich and Beauregard. Its upper length has steep grade and narrow channel, while below Hayange it widens out and the flow is much slower. Many places in the lower portion it divides into two or more channels. There is a ford to the northwest of Knuthange. Length of the stream is 16km. At Florange the width is 5m (16 ft.) and the depth 1.8m (6 ft.). The bridges are listed under that heading.

RAU. KISSEL

This small stream rises near Kanfen on the northern edge of the quadrangle and flows southeast and into the Moselle at Garsch. Its length is 12.3km, and its width, near Garsch, is 5m (16 ft.). There is a dam across the stream a short distance above Garsch, diverting the water for a mill. The bridges are listed under that heading.

RAILROADS

The railroads of this quadrangle, for the most part, center at Thionville. The following list gives the divisions of the railroads appearing on this quadrangle, and the descriptions are given in the order named:

(1) Line from Richmont to Kanfen. Section of the line from Metz to Luxembourg.

(2) Line from Thionville to Malling. Section of the line from Thionville to Karthaus.

(3) Line from Thionville to Metzervisse. Section of line from Thionville to Volklingen via Teterchen and Hargarten.

(4) Line from Audun-le-Roman to Thionville. Section of the line from Charteville to France-Lorraine border via Audun-le-Roman and line from France-Lorraine border to Thionville.

(5) Line from Mance to Breham-la-Ville via Audun-le-Roman. Section of the line from Briey to Audun-le-Roman and Hussigny.

(6) Line from Anderny to Audun-le-Roman. Section of line from Baroncourt to Audun-le-Roman.

(7) Line from Fouloy to Hirps. Section of line from Fontoy to Audun-le-Ticche.

(8) Line from Hayange to Batzendal.

(9) Line from Ebange to Hayange.

(10) Line from Beauregard to Metzange.

(11) Line from Beauregard to Gavisse. Section of the line from Beauregard to Mondorf.

(12) Line from Thionville to Yutz-Basse (Nieder Jeutz).

(13) Line from Thionville to St. Francois.

(14) Line from Fontoy to Thionville.

Line: Richmont to Kanfen

This is a section of double-tracked, standard-gauge main line from Metz to Luxembourg, with ordinary cuts and fills. Line enters quadrangle near Richemont, follows left bank of Moselle to Beauregard, crosses to right bank for about 2km, through Thionville, turns north across Moselle, leaving the quadrangle near Kanfen. The curves are somewhat numerous north of Thionville and the maximum grade is 1.4%. Length of line in quadrangle approximately 18km. Connection at Thionville for double-track lines, east and west.

Important points on the line:

Bridge. Over the river Orne. Masonry bridge; skewed to 75 deg. Five arches of 10.38m each, with circular vaults of 1.25m rise; two arches of 3m opening each, with semi-circular vaults. Thickness of vaults, .90m. Height under the intrados, 5.40m. Piers 1.55m thick. Length of bridge 65.30m. Foundation: sand and gravel; average water level, 1.50m. *Two mine chambers in the southern abutment*, divided into two sections, .40m x .40m x 1.80m and .70m x .80m x .90m, with a gallery of .60m x .80m x 3.10m. Bridge No. 56.

Bridge. Over mill race. Masonry bridge. One arch of 6m opening. Bridge No. 57.

Over-grade crossing. Metal foot bridge joining the Metz-Diedenhofen highway to the Reichersberg-Grande-Moyeuvre road. Bridge No. 58.

Stop at Reichersberg. Stop exclusively reserved for passenger and baggage traffic. Receipt building to the right. Telegraph office. Altitude, 160.1m.

Maximum up-grade between Reichersberg and Ueckingen, 1/444; 0.2%

Bridge. Over the rau. Greffier. Masonry. Two arches of 3m opening. Bridge No. 59.

Bridge. Over the rau. Pepinville. Masonry. Two arches of 1.6m opening. Bridge No. 60.

Bridge. Over the rau. Brouck. Masonry. Two arches of 2m opening. Bridge No. 61.

Over-grade crossing (at the entrance to the following station). Ueckingen-Fentsch highway. Metal. Two spans of 30m. Width of flooring, 6m. Bridge No. 62.

Station at Ueckingen. Receipt building to the right, enlarged in 1913. Telegraph office. Ticket office. Three main tracks, two of which are for the Metz-Luxembourg line and one for the Wendel freight line; one turn-out to the left between the lines mentioned above; 30m long, freight shed to the left. Commercial plat-

form, 30m long, to the left; 25-ton track scales. Four and eight-ton loading cranes. Three 4m turn-tables for cars. Two stone platforms, one of which is 60m x 10m and the other 130m x 22m. Three sidings, two of which are double entry and 350m long; the other is 100m long, switched to the preceding in the direction of Diedenhofen and ending against the commercial platform. Two turn-outs, 200m long, switched in the direction of Reichersburg from the main tracks. Industrial extension: (1) to the left, to a brewery and a factory (one track connected with the above-mentioned turn-outs); (2) to the right, to the metallurgical plants and the blast furnaces of Ueckingen, belonging to Stumm Bros. (three tracks).

In addition, to the north of the above-mentioned buildings and to the right of the main tracks there is a shunting station, composed of numerous sidings and shifting tracks; this shunting station was enlarged in 1913. Altitude, 156.5m.

Maximum up-grade between Ueckingen and Diedenhofen, 25%.

Culvert. Over a brook. Bridge No. 63.

Over-grade crossing. Foot bridge. Bridge No. 65.

Over-grade crossing. Road from Ebingen to Maisn-Neuve. Metal bridge. Bridge No. 66.

Branch. To the right (at the northern end of the Ueckingen shunting station and following the preceding over-grade crossing). Double-track; military link with the Diedenhofen—Audun-le-Roman line.

Bridge. Over the Vieille-Fentsch. Masonry. One arch of 8m opening. Vaulted in elliptical arc of 2.33m rise and .8m thick. Height under the intrados, 3.03m. Bridge No. 67.

Bridge. Over the old bed of the Fentsch. Masonry. One arch of 8m opening. Bridge No. 68.

Branch. To the left. Private, one-track line from Ebingen to Hayingen, belonging to the Wendel firm.

Under-grade crossing. Branch of the above-mentioned line to the Moselle. Masonry bridge, rebuilt in 1914. Bridge No. 69.

Branch. To the left. Connection with the Ebingen-Hayingen line.

Over-grade crossing. Double track; freight and military connection with the Diedenhofen-Audun-le-Roman line. Metal skew bridge. Three spans of 25m each. Bridge No. 70.

Block station at Ebingen. Altitude, 155.4m.

Shunting station at Ebingen. System of ten double entry sidings to the left and the connection with the private lines (Wendel), from Ebingen to Hayingen and from Diedenhofen-Beuaregard to Metzingen. Thirty-ton track scales. Eight-ton loading crane.

Under-grade crossing. Road from Gassion farm to Terwen. Bridge No. 71.

Over-grade crossing. Line from Diedenhofen to Audun-le-Roman. Metal skew bridge. Three spans. Piers and abutments of masonry. Length of bridge, 45m; width, 16m. Bridge No. 72.

Industrial siding. To the left; length, 600m.

Bridge. Over the Fentsch. Length, 4m. Bridge No. 73.

Branch. To the left. Double-track line serving the Beauregard freight station. This station is formed by the tracks from the old station at Diedenhofen (left bank). It is comprised of: (1) seven sidings, 200m long each and ending blind; these sidings are separated into groups of two, by three stone platforms, 130m, 200m and 80m long; access to this platform is afforded from the Beauregard side; (2) connections with the Diedenhofen-Mondorf narrow-gauge line. Commercial platform. Twenty-five-ton track scales. Four-ton loading crane. Terminus of the private standard-gauge freight line from Diedenhofen-Beauregard to Metzingen. The line is rejoined on the right by the double-tracked Diedenhofen—Audun-le-Roman line, which flanks it from this point on into the station at Diedenhofen. Five tracks on the same roadbed.

Under-grade crossing. Diedenhofen-Metz highway. Metal bridge. Two spans. Piers and abutments of masonry raised in 1913. Bridge No. 74.

Bridge. Over the Moselle. Metal bridge. Five 25m spans, renewed in 1911. Latticed, American girders with parabolic upper chord, vertical braces and diagonal ties. Lower flooring. Piers and abutments of masonry raised in 1908. Piers are 25m long and 2m thick. Length of bridge, 145m. Clearance, 4.24m. *In each pier there are two mine chambers*, placed 1.5m above the average water level. A foot passage is provided on the downstream side of the bridge. The

abutments are arranged for defense by means of iron gratings, thus permitting a closing of the bridge at either end. Two casemated block-houses of reinforced concrete defend either end of the bridge at its approaches. Bridge No. 75.

Passenger station at Diedenhofen (Thionville). This station extends from the bridge over the Moselle to the under-grade crossing of the Diedenhofen-Sarreluis highway and has replaced the former station which was located on the present site of the Beauregard station, mentioned above. Receipt building to the left, 65m by 10m. Telegraph office. Post-office, 13m by 9m. Shops and offices to the left. Two under-ground passages linking the three passenger platforms. Seven main tracks connected by four switches; three of these are for the Metz-Luxembourg line and the Diedenhofen-Karthaus line, one of them being common to both lines; two for the Diedenhofen—Audun-le-Roman line, and two for the Diedenhofen-Volklingen line. System of five sidings, to the left, at the entrance to the station, before coming to the receipt building, switched in the direction of Ueckingen and blind at other end. System of 12 sidings, 400m to 800m long, to the right; three of these are double entry and nine are switched in the direction of Ueckingen and end in a bumper against the Diedenhofen-Illingen road. Rotunda for 26 locomotives, to the right, 20m long, at the exit from the station. Water tank. Two Saxby switch towers; one to the right, near the bridge over the Moselle, and between the main tracks before coming to the receipt building. Terminus of the line belonging to the Wendel firm on the southern side of the receipt building. Altitude, 154.7m.

Under-grade crossing. Diedenhofen-Sarrelouis highway and the Diedenhofen-Niederjeutz narrow-gauge line. Metal bridge. One span. Seven tracks over the bridge. Bridge No. 76.

Freight station at Diedenhofen. Two freight sheds to the left, 70m by 75m. Offices before coming to the freight sheds. Commercial platform, 60m long. Thirty-ton track scales. Six-ton loading crane. Stone platform, 310m by 12m. Freight yard. System of 16 sidings, 600m to 800m long each, serving the sheds and the platform; nine of these are double entry and seven are switched in the direction of Luxembourg and blind at the other end. Turn-tables for cars. System of 15 double-entry sidings, each 500m to 600m long, between the tracks from Karthaus and Volklingen. Shed for 12 engines, with a turn-table to the right, at the entrance to the station. Three water tanks, two of which have a capacity of 50 cu. m., near the above-mentioned engine shed; the other water tank has a capacity of 100 cu. m. to the west of the first-mentioned system of sidings. Two coal storehouses, one of which will hold 1,600 tons and is near the engine shed; the other will hold 2,000 tons and is between the first-mentioned system of sidings and the Moselle. *Military platform, 520m long, to the right of the Volklingen line and flanking the Diedenhofen-Niederjeutz highway and served by two sidings which cross the main group of tracks.*. Shed, 240 sq. m., at the southern end of the military platform. Three Saxby switch towers; one to the left at the entrance to the station, opposite the freight sheds; one between the Trier and the Luxembourg lines, at the exit from the station; one at the end of the system of sidings. Altitude, 154.8m. Maximum up-grade between Diedenhofen and the Maison-Rouge block station, 1/112 (0.9%).

The two lines, Karthaus and Volklingen, cut off to the right at the exit from the freight station at Diedenhofen. Two tracks on the same roadbed from this point on.

Bridge. Over the Moselle (at the exit from the preceding station). Metal bridge, similar to the preceding bridge. Five 25m spans. Masonry piers and abutments. Average length of the piers, 31m. Thickness of the piers, 2m. Height above the highest water level, 4.28m. Length of bridge, 145m. *Mine chambers in the piers as in the preceding bridge.* Approach ramps closed by iron gratings. Defensive block-houses at either end of the bridge. Bridge No. 77.

Fill. To the left. Length, 1.2km.

At the exit from the preceding bridge the line is paralleled on the right by a canal, 500m by 10m by 3m.

Culvert. Over the rau. Monhofen. Bridge No. 78.

End of fill.

Fill. Length 1km; average height, 2m to 3m.

Culvert. Over the ditch from the La Grange pond. Bridge No. 79.

Under-grade crossing. Diedenhofen-Cattenom highway and the narrow-gauge line Diedenhofen-Mondorf. Metal skew bridge. One span of 7m normal opening. Bridge No. 80.

End of fill.

Block station at Maison-Rouge. Altitude, 160.7m.

Maximum up-grade between the block station at Maison-Rouge and Grosshettingen, 1.15%.

Cut. Length, 910m; maximum depth, 20.9m; bank slopes 5/4; marly lias.

Bridge. Over the Kiesel, an affluent of the Moselle. Masonry. Semi-circular vault of 8m opening. Thickness of the vault, 1m. Height under the intrades. 6.6m. Bridge No. 81.

Under-grade crossing. Road from Gross-Hettingen to Garsch. Length, 4m. Bridge No. 82.

Fill. Length, 1km; height, 2m to 3m.

Under-grade crossing. Road from Grosshettingen to Garsch. Length, 4m. Bridge No. 82.

End of fill.

Cut. Length, 800m; maximum depth, 10m.

Over-grade crossing. Old Roman highway. Masonry bridge. One arch. Elliptical arch of 10m opening. Bridge No. 83.

End of cut.

Fill. Length, 350m.

Station at Gross-Hettingen. Receipt building to the left. Telegrap office. Three tracks, of which the two to the right are for the Metz-Luxembourg Railroad, and the one to the left for the private line from Gross-Hettingen to Entringen; this private line serves the Charles Ferdinand mine and belongs to Stumm Bros. and Co. of Neunkirchen. Two commercial platforms to the left before coming to the receipt building, one of which is 40m by 6m to the left, and the other 80m by 8m, to the right and served by a side-track. Twenty-six ton track scales. Six-ton loading crane. Stone platform, 120m by 12m; 500m siding to the left, blind at either end and joined to the main tracks by two switches. Three sidings to the right, two of which are 510m long and double entry; the other is 200m long, blind in the direction of Diedenhofen and linked on the other two sidings on the other end. Altitude, 183.3m. Maximum up-grade between Gross-Hettingen and Suftgen, 1.3%. The line is paralleled on the left for about 500m by the private line from Gross-Hettingen to Entringen. Three main tracks on the same roadbed.

End of fill.

Cut. Length, 316m; maximum depth, 12.9m; terrain, sub-soil, lias.

Over-grade crossing. Road from Gross-Hettingen to the quarries. Metal bridge. One span of 12m opening covers three tracks. Bridge No. 84.

Over-grade crossing. Metz-Luxembourg highway. Metal bridge. One span of 12m covers the three tracks. Bridge No. 85.

End of cut.

The line from Gross-Hettingen to Entringen cuts off to the left.

Fill. Length, 150m.

Bridge. Over the Kiesel Back. Masonry. One arch of 5m opening. Bridge No. 86.

End of fill.

Cut. Length, 1km; curved; depth, 8m to 10m.

Over-grade crossing. Road from Sotrich to Kanfen. Bridge No. 87.

End of cut.

Fill. Length, 600m.

Culvert. Over the rau. Immerhof. Bridge No. 88.

Under-grade crossing. Road from Sotrich to Kanfen via the Immerhof farm; 4m wide. Bridge No. 89.

End of fill.

Cut. Length, 600m; depth, 8m to 10m.

Block station at Immerhof.

Fill. Length, 1.1km.

Bridge. Over a tributary of the Kiesel and a local road; width, 4m. Bridge No. 90.

End of fill.

Cut. Length, 400m; curve; depth, 10m.

Over-grade crossing. Road from Kanfen to the Bois de Kanfen. Masonry. One arch of 12m opening. Segmental arch; 6m head space. Bridge No. 90*a*.

For continuation of the line, see Longwy Southeast.

LINE: THIONVILLE TO MALLING

Double-track, standard-gauge line down the right bank of the Moselle. Low cuts and fills. Easy grade and few curves. Length from Thionville to Malling, on the eastern edge of quadrangle, 12.47km.

Important points on the line:

Double-track main line. Standard-gauge. Hilf rails, steel, profile XII and XIII. Total length of the line, 70.15km. Length of the section between Diedenhofen and the frontier, 22.18km, of which 6.076km are level, 16.104km grade, 16.056km straight and 6.124km curve. Grades vary from 1/260 to maximum between Mallingen and Sierck. Few curves and generally of large curvature. Minimum curvature, 300m, between Mallingen and Sierck. The line is built, for the most part, upon a fill of from 5m to 6m high; but, nevertheless, it is sometimes inundated by the big overflows of the Moselle. Constructions to notice: Bridge over the fortifications of Diedendorf; water tank and engine sheds at Diedenhofen; repair shops at Niederjeutz. The section is equipped with the block system and bell signals and telephone over its entire extent.

Station at Diedenhofen. (Passenger.) Altitude, 154.8m (see preceding line for a description of this station). The line is paralleled on the right by the line Diedenhofen-Volklingen for a distance of about 2.2km. Four main tracks on the same roadbed.

Station at Diedenhofen (freight). See preceding line for a description of this station.

Maximum down-grade between Diedenhofen (freight station) and the entrance to the shunting station at Niederjeutz, 2%.

Bridge. Over the moat of the Diedenhofen fortifications. Metal skew bridge. Three 12m spans. Piers and abutments of masonry. Piers 2.5m thick and 5m high, *provided with mine chambers.* A block-house defends the construction. Bridge No. 112.

Eastern entrance to the station at Niederjeutz. Block station. Altitude, 153.3m. The Diedenhofen-Volklingen line cuts off to the right. Maximum down grade between the entrance to and the exit from the shunting station at Niederjeutz, 0.13%.

Shunting station at Niederjeutz. System of 36 double-entry sidings to the left, 350m to 1.600m long each. Kunzing repair shops. Charcoal and wood depots (important). Workmen's settlement.

Eastern exit from the station at Niederjeutz. Block station. Altitude, 152.5m.

Maximum down-grade between the exit from the shunting station at Niederjeutz and Niederham, 0.09%.

Under-grade crossing (in the interior of the preceding station). Road from Niederjeutz to the ferry. Metal bridge. One 4m span. Bridge No. 113.

Bridge. Over the Helpert Bach (in the interior of the preceding station). Metal bridge. One 4m span. Bridge No. 114.

Stop at Niederham. Exclusive stop for passenger and express service. Receipt building to the left. Altitude, 151.9m. Maximum down-grade between Niederham and Konigsmachern, 0.16%.

Bridge. Over an arm of the Bibisch Bach. Metal bridge. One 6.7m span. Masonry abutments. Bridge No. 115.

Bridge. Over the Bibisch Bach. Metal bridge. One 6.7m span, supported by one pier and masonry abutments. Bridge No. 116.

Station at Konigsmachern. Receipt building to the right. Telegraph office. Freight shed, 15m by 4m, to the right after passing the receipt building. 35m by 5m commercial platform. Twenty-five-ton scales. Six-ton loading crane. 70m by 12m stone platform. Two sidings to the right, one of which is 110m long, blind at both ends and joined to the main lines by a switch; the other is shorter, serves the freight shed and is switched upon the first siding. *Two double-entry siding, 560m long, serve a military 500m long platform.* Altitude, 151.4m. Maximum up-grade between Konigsmachern and Mallingen, 0.25%.

Bridge. Over the Canner River (at the exit from the preceding station). Metal bridge. Two 3.6m spans. Piers and abutments of masonry 2m thick. Clearance, 5m. Width of the bridge, 7.5m. Bridge No. 117.

Fill. Length, 1.7km; straight.

Culvert. Over a brook. Bridge No. 118.

Two under-grade crossings. Two local roads. Metal bridges. One 4.2m span. Bridge No. 119.

Culvert. Over the rau. de Metrich. Bridge No. 120.

End of fill.

Cut. Length, 750m; maximum depth, 10m.

Over-grade crossing. Road from Metrich to Mallingen. Bridge No. 121.

End of cut.

Bridge. Over the Underbach. Metal bridge. One 8.84m span. Bridge No. 122.

Bridge. Over a derivation of the Underbach. Metal bridge. One 4.9m span. Bridge No. 123.

Cut. Length, 1.2km; maximum depth, 6m; curve.

Stop at Mallingen. Exclusive stop for passenger and baggage. Receipt building to the left. Telegraph office. Altitude, 154.5m. Maximum down-grade between Mallingen and Sierck, 0.4%.

End of cut.

For continuation of the line, see Sarreguemines Northwest.

LINE: THIONVILLE TO METZERVISSE

Main line is double-tracked. Standard gauge. Single-headed steel rails, Hilf system, profile XII. The total length of the line is 70.26km, of which 15.761km is level, 54.499 grade, 44.533km straight and 25.727km curved. Maximum grades between stations vary from 1.7% to 0.14%, with the maximum of 1.7% between Brettnach and Wadgassen. Many and important cuts and fills. Constructions to notice: the bridge over the fortifications (moat) of Diedenhofen; bridge over the Kanner; tunnel and viaduct at Budingen; tunnel and viaduct at Ebersweiler; bridge over the Nied; two tunnels between Teterchen and Hargarten; bridge over the Saar. Engine sheds at Diedenhofen, Busendorf, Wadgassen, Volklingen. Water tanks at Diedenhofen, Kedingen, Busendorf, Teterchen, Hargarten and Wadgassen. The line is equipped with the block system between Diedenhofen and Kunzig, and between Ebersweiler and Busendorf. Telephone and bell signals on its entire extent.

The double-tracked section between Anzelingen and Busendorf is common to the lines from Metz to Dillingen and from Diedenhofen to Volklingen.

Important points on the line:

Station at Diedenhofen (passenger). A description of this station is given in the first line treated in this monograph, as well as the freight station. Maximum up-grade between Diedenhofen (freight station) and Kunzig, 0.7%. The line is paralleled on the right by the Diedenhofen-Karthaus line for a distance of approximately 2.2km. Four main tracks on the same roadbed.

Shunting station at Niederjeutz (southern entrance). This station is described under the second line in this monograph, as well as the section of the line between Diedenhofen and Niederjeutz. The line Diedenhofen-Karthaus cuts off to the left.

Fill. Length, 1.7km.

Cut. Length, 400m.

Fill. Length, 700m.

Under-grade crossing. Foot-path running to the new Kunzig repair shops. Metal bridge built in 1912. Bridge No. 124.

End of fill.

Cut. Length, 800m.

Over-grade crossing. Road from Kunzig to Niederham. Width of road, 5m. Bridge No. 125.

Over-grade crossing. Local road. Metal bridge, one arch. Width of road, 4m. Bridge No. 126.

End of cut.

Fill. Length, 600m.

Station at Kunzig. Receipt building, 10m x 8m, to the right. Telegraph office. Freight shed, 10m x 4m, to the right, before coming to the receipt building. Commercial platform, 20m x 10m. Thirty-ton scales. Three-ton loading crane. Two sidings to the right, one of which is blind at both ends and joined to the main track by two switches; the other is switched from the preceding siding and ends in a bumper near the receipt building. Three double-entry sidings to the left, one of which is 600m long and one 660m long. Switch between the main tracks and the sidings. An industrial extension to the left to the repair shops at Kunzig. Altitude, 167.8m. Maximum up-grade between Kunzig and Diesdorf, 1%.

Bridge. Over the Bibish Bach and over a local road (in the interior of the preceding station). Masonry bridge. One 15.3m arch. Bridge No. 127.

Culvert. Over an irrigation ditch. Masonry bridge. One arch of 2m opening. Bridge No. 128.

End of fill.

Entrance into the forest of Ueberbibisch.

Cut. Length, 250m.

Exit from the forest of Ueberbibisch.

Fill. Length, 500m.

Under-grade crossing. Local road. Bridge No. 129.

Culvert. Over a brook. Masonry bridge. One arch of 1m opening. Bridge No. 130.

End of fill.

Cut. Length, 300m.

Culvert. Over a brook. Bridge No. 131.

Cut. Length, 150m.

Fill. Length, 1km.

Station at Diesdorf. Receipt building, 10m x 8m, to the right. Telegraph office. Freight shed to the right before coming to the receipt building. Commercial platform, 25m x 4m. Twenty-five-ton track scales. Stone platform, 150m x 12m. Double-entry siding, 130m long, to the right, serving the freight shed and the platform. One 400m double-entry siding to the left. Two industrial extensions, switched upon the above-mentioned siding to a cement factory and lime kilns. Altitude, 192.5m. Maximum up-grade between Diesdorf and Metzerwiese, 1.1%.

Under-grade crossing (in the interior of the preceding station). Road from Stuckingen to Inglingen. Metal bridge. One span of 6m opening. Straight solid master girders. Masonry abutments. Clearance, 4.3m. Bridge No. 132.

End of fill.

Cut. Length, 200m.

Fill. Length, 200m.

Fill. Length, 300m.

Culvert. Over a brook. Masonry, bridge. One arch of 0.6m opening. Bridge No. 133.

End of fill.

Cut. Length, 1.5km; curve.

Over-grade crossing (in the interior of the following station). Road from Metzerwiese to Diesdorf. Width of the roadway, 7m. Bridge No. 134.

Station at Metzerwiese. Receipt building to the right at the exit from the station. Telegraph office. Freight shed, 10m x 4m, to the right before coming to receipt building. Commercial platform, 25m x 4m. Twenty-five-ton scales. Six-ton loading crane. One 200m siding, blind at both ends and joined to the main tracks by two switches, at the right. Stone platform, 180m x 18m. *Military platform to the left, 500m x 7m, served by two double-entry sidings of 520m length each.* Two industrial extensions, one of which is to the left and runs to lime kilns and the other to the right running to a cement factory. Altitude, 214.7m. Maximum grade between Metzerwiese and Kedingen, 1.1%.

End of cut.

Cut. Length, 200m.

Fill. Length, 200m.

Cut. Length, 900m; curve.

For continuation of the line, see Sarreguemines Northwest.

Line: Audun-le-Roman - Thionville

Single-track, standard-gauge line from a point near Audun-le-Roman, where it enters the quadrangle, to Fontoy, and double track from Fontoy to Thionville. Steel rails, profile XI. Width of the roadbed, 8.8m. Total length of the line, 24.35km. Length of the section between the French frontier and Diedenhofen, 18.55km, of which 1.219km are level, 17.331km grade, 10.638km are straight, and 7.912km are curve. Maximum grades between stations vary from 1% to 0.7%, with the maximum between Hayingen and Florchingen. Numerous curves and generally of weak curvature; minimum radius of curvature of 300m at the exit from the station at Florchingen. Very important cuts and fills. Important constructions: tunnel between Fentsch and Kneuttingen and a viaduct over the valley of the Fentsch. Engine sheds at Diedenhofen. Water tanks at Fentsch, Hayingen, Florchingen and Diedenhofen. The section is equipped with the

block system betewen Hayingen and Diedenhofen and has bell signals and telephone on its entire extent.

Important points on the line:

Grade crossing. Road; width, 5m.

Grade crossing. G. C. D. No. 23 bis from Etain to Audun-le-Roman and Tucquenieux; length, 8.7km.

Grade crossing. Road; width, 5m.

Industrial extension (temporary).

Grade crossing. G. C. D. No. 7 bis, from Mars-la-Tour to the Luxembourg Frontier; width, 5m (to be removed; an over-grade crossing is under construction).

Grade crossing. Road; width, 5m (to be removed).

Grade crossing. Road; width, 5m.

Bridge. Vaulted; ravine; 12m opening. A foot-path also runs under the track. Bridge No. 91.

Two grade crossings. Roads; width, 5m.

French frontier. Altitude, 287.5m. Maximum down-grade between the French frontier and Fentsch, 1%.

Fill. Length, 375m; maximum height, 7m.

Culvert. Over the brook from Moyeuvre Mill. Bridge No. 92.

The line is joined on the left by the single-track line from Fentsch to Deutschoth. Two tracks on the same roadbed from this point on for a distance of approximately 1km.

End of fill.

Station at Fentsch (Fontoy). Receipt building to the left, 46m x 12m. Telegraph office. Customs office to the right, opposite the receipt building. Three main tracks, one of which is a turn-out. Two freight sheds to the left before coming to the receipt building, one of which is 40m x 5m and the other 32m x 5m. Commercial platform, 50m x 5m, between the two freight sheds. Two 30- and 25-ton scales. Five-ton loading crane. Two sidings, to the left, 200m long each, serve the sheds and the platform; they are switched in the direction of the French frontier and end in a bumper against the receipt building. Six double-entry sidings of 600m in length to the right. Two water tanks to the right, beyond the system of side-tracks. Turn-table for locomotives, 20m in diameter. Two switch towers (Saxby), of which one is to the left at the entrance to the station and the other to the right at the exit and near the following under-grade crossing. Altitude, 270.6m. Maximum down-grade between Fentsch and Kneuttingen, 1/100 or 1%.

Under-grade crossing (at the exit from the preceding station). Road from Fentsch to the freight platform. Metal bridge. Bridge No. 93.

Cut. Length, 335m; maximum depth, 8.55m.

Fill. Length, 579m; maximum height, 7m.

Two under-grade crossings. Highway from Fentsch to Mommeringen and the road from Fentsch to the Bois de Treches. Bridge No. 94 and 94 A.

End of fill.

Two cuts. Maximum depth, 10m and 14m.

Fentsch tunnel. Masonry. Semi-circular vault dug into a strata of lower colith. Length of tunnel, 324m; height, 6.25m; width, 8m. 201m of the tunnel is formed by one vault of two layers of brick and 84m by a vault of one layer of bricks, .5m thick and 39m of unhewn stone. *Six mine chambers are symmetrically placed in the right wall of the tunnel; the first two are 8m from the mouth toward Thionville; the others are placed every 8m. They are 1.10m x 1.10m x .90m, with a gallery, 3.25m x 0.80m x 1m, and can receive a charge of 200kgm.*

Cut. Length, 300m.

Fill. Length, 225m; maximum height, 10.7m.

Under-grade crossing. Local road to the Carl Lueg mine at Haut-Pont, 4m wide. Bridge No. 95.

End of fill.

Fill. Length, 150m; maximum height, 17m.

Under-grade crossing. Local road; width, 4m. Bridge No. 96.

End of fill.

Cut to right; fill to left.

Branch. To the left. Line, 2.4km in length, serving the Carl Lueg mines at Haut-Pont and those belonging to the Bochumer Verein at Gustal. Three double-entry sidings to the left.

Fill. Length, 1km; height, 14m.

Viaduct. Over the valley of the Fentsch and the Metz-Longwy highway. Masonry viaduct. Nineteen arches, the central one of which is 22m and the other 18 13m in opening. Semi-circular vault of .8m thickness. Maximum height under the intrados, 24.5m. Foundation, clayey gravel. *Two mine chambers in the second pier from the southwestern end of the viaduct.* The highway passes under the ninth arch. Bridge No. 97.

Fill. Length, 150m; maximum height, 15.77m. The line is joined on the right by the double-track line from Hayingen to Algringen and Batzental. Four tracks on the same roadbed from this point on into the station at Hayingen.

Stop at Kneuttingen. Receipt building on the right, rebuilt in 1912-1913. Telegraph office. Stop for exclusive passenger and baggage service. Scales. Altitude, 221.5m. Maximum down grade between Kneuttingen and Hayingen, 1%.

Cut. Length, 200m.

Over-grade crossing. Local road. Metal bridge, rebuilt in 1912. One span. Bridge No. 98.

End of cut.

Fill. Length, 1.7km; maximum height, 13.5.

Under-grade crossing. Road from Kneuttingen to Nilvingen. Bridge No. 99.

Under-grade crossing. Road from the Hayingen blast furnaces to the Marspiche mine. Bridge No. 100. The line is paralleled on the left for a distance of approximately 984m by the single-track private line serving the Marspiche mine.

End of fill.

Station at Hayingen. Receipt building, 22m x 9m, on the right, enlarged in 1913. Tax office. Telegraph office. Employees dwelling-house, for six employees, built in 1913. Four main lines joined by two switches: two to the right for the Audun-le-Roman - Diedenhofen line and two to the left for the line Hayingen-Algringen-Batzental. Freight shed, 45m x 11m, to the right before coming to the receipt building. Two commercial platforms to the right, one of which, 36m x 6m, adjoins the freight shed; and the other, 20m long, is behind the receipt building. Fifty-ton scales. Five-ton loading crane. Stone platform, 140m x 10m, to the right. Four sidings to the right before coming to the receipt building, 200m to 325m long, and switched in the direction of Fentsch and blind at the other end. One siding to the right after passing the receipt building, switched in the direction of Fentsch and blind at the other end. One siding to the right after passing the receipt building, switched in the direction of Florchingen and ending in a bumper against the smaller platform. System of three sidings, double entry, to the left, from 396m to 496m long. Industrial extensions: (1) standard-gauge line, 2.5km long, with many sidetracks, serves the Hayingen blast furnaces, which belong to the Wendel firm; (2) to the left, a line serving the Marspiche mine. 50 cu. m. water tank. Two switch towers (Saxby) to the right, one at the entrance to the station and the other at the exit. Altitude, 198.7m. Maximum down-grade between Hayingen and Florchingen, 1%.

Under-grade crossing. Road from Hayingen to Marspich. Metal bridge. One span 8.2m long. Straight, solid girders, .68m high and spaced 1.67m, support the metal flooring. Masonry abutments support the girders on a block of cast steel. Length of the bridge, approximately 10m. Metal railings, 1m high. Width of the roadbed, 16.33m. An opening 1.71m long is in the center of the bridge. Bridge No. 101.

Cut. Length, 600m.

Over-grade crossing. Private line which serves the Hayingen blast furnaces belonging to the Wendel firm, and ending at the slag heaps. Bridge No. 102.

Branch. To the left, to a gas plant.

End of cut.

Fill. Length, 300m.

Cut. Length, 300m.

Fill. Length, 200m.

Block station at Suzingen.

Cut. Length, 200m.

Over-grade crossing. Road from Schremigen to the Diedenhofen forest; width, 4m. Bridge No. 103.

End of cut.

Fill. Length, 1.2km.

Five culverts. Over the drainage ditches coming from the Diedenhofen forest. Bridge No. 104.

Station at Florchingen. Receipt building to the left. Telegraph office. Altitude, 170m. Maximum down-grade between Florchingen and Diedenhofen, 0.7%.

Fill. Length, 3.3km.

Shunting station at Florchingen. Station, built in 1907, extends over a distance of approximately 2km between the grade crossing of the Florchingen-Weimeringen road and the following bridge over the Fentsch. Five main tracks united by switches, of which two to the left are for the Audun-le-Roman—Diedenhofen line; two, in the middle, for the freight and military extension from Florchingen to Ueckingen, and one, on the right, for freight from Florchingen to the shunting station at Ebingen. Four sidings to the right, switched in the direction of Hayingen and blind at the other end. Two double-entry sidings, 2.5km long, to the left. System of shunting tracks at the entrance to and the exit from the station, switched on the lines from Ebingen and Ueckingen. Thirty-ton scales. Six-ton loading crane. Water tank, turntable for engines.

Under-grade crossing (in the interior of the preceding station). Road from Florchingen to the Bettingen road. Bridge No. 105.

Under-grade crossing (in the interior of the preceding station). Road from Florchingen to Terwen. This bridge gives passage to six tracks. Bridge No. 106.

Bridge. Over the River Fentsch. Metal bridge, enlarged in 1907. One span supports six tracks. Bridge No. 107.

Branch. To the right. The double-track freight and military extension from Florchingen to Ueckingen.

Under-grade crossing. Standard single-track line from Diedenhofen-Beauregard to Metzingen, serving the iron mine. Bridge No. 108.

Under-grade crossing. Road from Beauregard to Ebingen. Bridge No. 109.

Branch. To the right, the above-mentioned freight and military extension. The tracks are common, from this point on to the following branch, to the two lines from Audun-le-Roman to Diedenhofen and from Diedenhofen-Beauregard to Metzingen.

Under-grade crossing. Line from Metz to Luxembourg. Metal skew bridge. Five spans. Masonry piers and abutments. Length of the bridge, 45m. Width of the bridge, 16m. Bridge No. 110.

End of fill.

Branch. To the right, to the Carlshutte. Single track 400m long.

Bridge. Over an arm of the Fentsch. Bridge No. 111.

Two branches. To the right, in the direction of Gassion, serving the Carlshutte and a cement factory. Total length of the sidings, 3.6km.

Branch. To the left. Industrial extension from Diedenhofen-Beauregard to Metzingen. The line is joined on the left by the line Metz-Luxembourg. Four main tracks on the same roadbed from this point on into the station at Diedenhofen.

Station at Diedenhofen. See the first line described in this monograph for the Diedenhofen station and the conclusion of the line from the above junction. Altitude, 154.8m.

LINE: MANCE TO BREHAM-LA-VILLE VIA AUDUN-LE-ROMAN

Single-track, standard-gauge line, with ordinary cuts and fills. Curves numerous; maximum, 5 deg. Grades from 1.1% to 1.5%.

Important points on the line:

Stop at Mance.

Bridge. Viaduct over the rau. Woigot; length, 46.08m. Single track. Three arches. Masonry. Bridge No. 136.

Two under-grade crossings. Roads; width, 5m. Bridges No. 137 and No. 138.

Station at Manciculles-Betinvillers.

Over-grade crossing. Country road from Tucquegnieux to Bettainvillers; width, 5m. Masonry. Two track. Bridge No. 139.

Under-grade crossing. I. C. road from Ottange to Juzemont; width, 5m. Bridge No. 140.

Industrial extension. To the Tucquegnieux (to the left).

Stop at Tucquegnieux.

Viaduct. Over a ravine. Length, 183m. Ten arches. Masonry. Bridge No. 141.

Under-grade crossing. I. C. road from Trieux to Saint Supplet; width, 5m.

Masonry. Bridge No. 142.

Over-grade crossing. Road; width, 6m. Reinforced concrete. Two tracks. Bridge No. 143.

Industrial extension. To the right, to the Sancy mine.

Stop at Sancy.

Two over-grade crossings. Roads; width, 5m. Masonry. Two tracks, one of which is the I. C. road from Ottange from Suzemont. Bridges No. 144 and No. 145.

Over-grade crossing. Road; width, 6m. Reinforced concrete. Bridge No. 146.

Grade crossing. Road from Anderny to Audun-le-Roman; width, 5m.

Station at Audun-le-Roman. Junction with the Charleville-Thionville line.

Grade crossing. G. C. D. from Audun-le-Roman to Etain; width, 5m.

Two under-grade crossings. Roads; width, 4m. Masonry. Bridges No. 147 and No. 148.

Over-grade crossing. Roads; width, 4m. Two tracks. (Bridge No. 128 of Metz Northwest.)

Stop at Serrouville.

Two grade crossings. Roads; width, 5m, one of which is the country road from Longwy.

Over-grade crossing. I. C. No. 13 (branch); width, 6m. Masonry. Double-tracked. Bridge No. 149.

Viaduct. Over the Crusnes River. Masonry piers and abutments. Mined. Metal flooring. Bridge No. 150.

Four under-grade crossings. Roads; width, 4m. One is the country road from Fillieres to Brehain-la-Ville. Bridges Nos. 151, 152, 153 and 154.

For continuation of the line, see Metz Southeast and Longwy Southeast.

Line: Anderny to Audun-le-Roman

Single-track, standard-gauge line, with heavy cuts and fills. Maximum curve, 4 deg. and 22 min.; maximum grade, 1.0%.

Important points on the line:

Under-grade crossing. Road; width, 5m. Bridge No. 155.

Viaduct. Over the Raufontaine ravine. Length, 180m. Masonry. Twelve arches. Mined. Bridge No. 156.

Stop at Anderny.

Grade crossing. I. C. No. 4 from the frontier to the Department of the Meuse; width, 6m.

Grade crossing. Road; width, 5m.

Station at Audun-le-Roman. Point of junction for the lines Charleville- Thionville and Briey—Audun-le-Roman—Hussigny-Villerupt.

Line: Fontoy to Hirps

Single-track, standard gauge line, with heavy cuts and fills. Maximum curve, 5 deg., 50 min.; maximum grade, 5.2%. Construction provides for second track in the future. This line serves primarily the mines in this section.

Important points on the line:

Station at Fentsch (see the Audun-le-Roman to Thionville line for a description of this station). Altitude, 270.7m. Maximum up-grade between Fentsch and Bollingen, 1.5%. The line is paralleled on the left for a distance of approximately 1km by the single-tracked line from Audun-le-Roman to Diedenhofen. Two tracks on the same roadbed.

Cut. Length, 500m. The Audun-le-Roman line cuts off to the left.

Cut. Length, 300m.

Fill. Length, 400m; curve.

Cut. Length, 200m.

Entrance into the Wasserholz forest.

End of cut.

Fill. Length, 150m.

Two culverts. Over two brooks. Bridges No. 158 and No. 159.

End of fill.

Cut. Length, 150m.

Fill. Length, 700m.

Culvert. Over a brook. Bridge No. 160.

Under-grade crossing. Local road. Bridge No. 161.

End of fill.

Three cuts. Length from 100m to 150m.

Fill. Length, 350m.

Two culverts. Over two brooks. Bridges No. 162 and No. 163.

End of fill.

Cut. Length, 500m; curve.

Over-grade crossing. Road from Bollingen to Bettstein. Bridge No. 164.

Exit from the Wasserholz forest.

End of cut.

Station at Bollingen. Receipt building to the right. Telegraph office. Two main tracks, one of which is a turn-out 730m long. Freight shed to the right after passing the receipt building. Two commercial platforms. Thirty-ton scales. Six-ton loading crane. One 500m long siding, serving the freight shed and the platform, switched in the direction of Aumetz and blind at the other end. Two double-entry sidings to the left, each 680m long. Terminus of the line under construction from Bollingen to Rumlingen. An industrial extension, 2.1km in length, to the iron mine Reischland, switched on the above-mentioned sidings. Three 300m sidings from this extension to the exit from the station; eight 200m to 300m sidings to the mine. Altitude, 333.7m. Maximum up-grade between Bollingen and Aumetz, 1/67 or 1.5%.

Fill. Length, 300m.

Fill. Length, 450m.

Culvert. Over a brook. Bridge No. 165.

Under-grade crossing. Highway from Aumetz to Fentsch. Metal skew bridge. One span. Bridge No. 166.

End of fill.

Cut. Length, 600m; deep; curve of 400m radius.

Over-grade crossing. Local road. Metal bridge. One span. Bridge No. 167.

End of cut.

Fill. Length, 400m.

Cut. Length, 1km; curve of 400m radius.

Branch. To the left. Industrial extension, approximately 2km long, serving the Amelie mine, which belongs to the Krupps. Two sidings of 500m and one of 300m in the interior of the mine.

End of cut.

Station at Aumetz. Receipt building to the left. Telegraph office. Two main tracks, of which one is a turn-out, 630m long. Freight shed to the left after passing the receipt building. Commercial platform. Thirty-ton scales. Six-ton loading crane. Three sidings to the left switched in the direction of Bollingen. Two double-entry sidings to the right, 550m and 620m; 13m-diameter turntable for engines. One 600m industrial extension to the Aumetz Friede mine, which belongs to the Aumetz Friede Lothringer Huttenverein Co.; the siding is switched to the turn-out at the exit from the station. Industrial extension on the left to the Erouville iron mine, which belongs to the Wendel firm. Altitude, 382.4m. Maximum up-grade between Aumetz and Hirps, 52%.

Cut. Length, 100m.

Cut. Length, 250m.

Fill. Length, 200m.

Fill. Length, 500m.

Cut. Length, 500m.

Fill. Length, 300m.

Cut. Length, 150m.

Fill. Length, 700m.

Under-grade crossing. Local road. Bridge No. 168.

End of fill.

Stop at Hirps.

For continuation of line, see Longwy Southeast.

LINE: HAYANGE TO BATZENTAL.

Double-track, standard-gauge line to Algrange and single track from latter station to end of line at Batzental. Maximum curve, 3 deg. 50 min.; maximum grade, 2.5%. Line was built to serve the mining district of Batzental.

Important points on the line:

Station at Hayingen.

Station at Kneuttingen. Altitude, 221m. See the Audun-le-Roman—Diedenhofen line for a description of these stations and the section of line between them. Maximum up-grade between Knuettingen and Algringen, 1.4%. The line from Diedenhofen to Audun-le-Roman cuts off to the left.

Fill. Length, 300m. The line is paralleled to the right by a 200m siding switched on the Aumetz-Friede industrial extension; this siding serves as an unloading platform.

Over-grade crossing. 1.2km industrial extension serving the Friede I and the Friede II mines, which belong to the Lorraine Company of Aumetz-Friede; this extension ends at Algringen station. Skew bridge. Bridge No. 169.

Under-grade crossing. Road from Algringen to the station. Bridge No. 170.

Station at Algringen. Receipt building to the right, enlarged in 1913. Telegraph office. Freight shed to the right before coming to the receipt building. Commercial platform. Two double-entry, 285m sidings to the right, running towards the receipt building and ending against it in a bumper. 20m-diameter turntable. Two 350m double-entry sidings. Industrial extensions: (1) to the right, 1.2km long to the Aumetz-Friede mines; (2) to the left, 2km long to the mines and the metallurgical plants of the Aumetz-Friede Co., the mines and the metallurgical plants of Fentsch and the Burbach mines. To the extensions are switched many side-tracks. An aerial funicular, 10.8km long, joins the Aumetz plants to the mines. Altitude, 231.6m. Maximum up-grade between Algringen and Batzental, 2.5%.

Fill. Length, 100m.

Cut. Length, 150m.

Fill to the right and cut to the left. Length, 700m.

The Halberg extension. Industrial extension to the left to the Molkte mine, which belongs to the Stumm Bros. and Co. of Nuenkirchen. Two main tracks, one of which is a turn-out. Length, 500m.

The Wilhelm extension. Extension to the left to the Wilhelm mine. One siding to the left, switched in the direction of Algringen and blind at the other end, joined to the main tracks by a switch. Four sidings to the right, two of which are double entry and two switched in the direction of Algringen from the preceding ones and blind at the other end.

Fill. Length, 500m.

Cut. Length, 400m.

Over-grade crossing. Foot bridge to the Wilhelm mine. Bridge No. 171.

Over-grade crossing. Local road serving the Wilhelm mine. The bridge, as well as the bridge above mentioned, covers the two main tracks and the industrial extension. Bridge No. 172.

End of cut.

Fill. Length, 1.3km.

Under-grade crossing. Road from Algringen to Oettringen. Bridge No. 173.

Station at Batzental. Two double-entry sidings to the left. Industrial extension to the right to the Witten II and to the left with the Oettringen mine.

Line: Ebange to Hayange.

Single-track, standard-gauge line serving primarily the mines in the vicinity of Hayange. Maximum curve, 3 deg. 50 min.; maximum grade, 0.5%.

Important points on the line:

Shunting station at Ebingen (see the Metz--Luxembourg line for a description of this station). The line is paralleled on the left for a distance of approximately 200m from the exit from the shunting station by the Metz-Luxembourg line. Three tracks on the same roadbed.

Over-grade crossing. Freight and military siding from the Metz-Luxembourg line to the Diedenhofen-Fentsch line. Metal skew bridge. Three 25m spans. Bridge No. 174.

Branch. To the left. 600m siding to the port on the Moselle and to the private (Wendel) line from Hagendingen to Diedenhofen.

Branch. To the right. Double-track siding, 500m long, to the stamp mill of the Thomas slag mill.

Bridge. Over the Vieille Fentsch. Masonry skew bridge. One arch. Bridge No. 175.

Fill. Length, 600m.

Bridge. Over the Vieille Fentsch. Masonry skew bridge. One arch. Bridge No. 176.

End of fill.

Bridge. Over the Vieille Fentsch. Masonry skew bridge. One arch. Bridge No. 177.

Fill. Length, 200m.

Bridge. Over a derivation of the Vieille Fentsch, which serves the mill at Florchingen. Masonry bridge. One arch. Bridge No. 178.

Industrial extension. To the left, to the Schremingen tile mill. One 300m double-entry siding; one 150m siding switched upon the former.

Bridge. Over the Vieille Fentsch. Masonry skew bridge. One arch. Bridge No. 179.

Industrial extension. To the left, to the Suzungen forge. Three sidings, one of which is a double-entry 1.2km long, one 600m long, and three 200m long, switched upon the foregoing. The line is three-tracked for a distance of about 600m.

Industrial extension. To the left, to a factory at Hayingen. Length, 300m. The line is double-tracked for a distance of about 300m.

Over-grade crossing. Line from the station at Hayingen to the blast furnaces at Hayingen, which belong to the Wendel firm. Bridge No. 180.

Industrial extension. To the blast furnaces at Hayingen. Many sidings in the interior of the plants.

LINE: BEAUREGARD TO METZANGE

Single-track, standard-gauge line serving primarily the mines at Metzange.

Important points on the line:

Shunting station at Beauregard (see the Metz-Luxembourg line for a description of this station).

Grade crossing. The Metz-Luxembourg line.

Branch. To the left. The double-tracked Audun-le-Roman—Diedenhofen line From this point on as far as the following branch the tracks are common to the Diedenhofen - Beauregard - Metzingen and the Audun-le-Roman—Diedenhofen lines.

Industrial extension. To the left. In the direction of Gassion, serving the Carlshutte and a cement factory. Total length of the tracks, 3.6m.

Bridge. Over an arm of the Fentsch. Bridge No. 181.

Industrial extension. To the left, to the Carlshutte. One track; length, 400m.

Fill. Length, 900m.

Under-grade crossing. Line from Metz to Luxembourg. Metal skew bridge. Three spans. Masonry piers and abutments. Length of bridge, 45m; width, 16m. Bridge No. 182.

Branch. To the right. The double-tracked Audun-le-Roman—Diedenhofen line.

Branch. To the left. One track, 400m long, extension to the shunting station at Ebingen.

End of fill.

Over-grade crossing. Line from Audun-le-Roman to Diedenhofen. Bridge No. 183.

Fill. Length, 500m.

Bridge. Over the Fentsch. Bridge No. 184. The line is paralleled on the right by a siding, double-entry, 300m long.

Fill. Length, 200m.

Fill. Length, 200m.

Bridge. Over the Weimeringer Bach. Bridge No. 185.

End of fill.

Cut. Length, 500m.

Fill. Length, 600m.

Iron mines at Metzingen. Two 200m sidings to the right.

LINE: BEAUREGARD TO GAVISSE

Single-track, narrow-gauge (1m) line. Maximum curve, 30 deg. 30 min.; maximum grade, 3.3%.

Important points on the line:

Station at Beauregard. Transshipping station and junction station for the state line from Metz to Luxembourg. Telegraph office. Fifteen-ton scales. The line runs through the suburb of Beauregard on the roadbed of the Diedenhofen-Mondorf highway.

Bridge. Over the River Fentsch. Bridge No. 187.

Station at St. Franz. Telegraph office. Turn-out to the right. Engine repair shops to the right, served by a 200m siding. Siding to the right to the narrow-gauge electric line from Diedenhofen to St. Franz. The line continues through St. Franz on the highway roadbed.

Stop at Scheuern.

Over-grade crossing. Line from Metz to Luxembourg. Metal skew bridge. One span of 7m opening. Bridge No. 188. The line still follows the highway, but upon a special roadbed.

Stop at Chateau Sainte Marie. Passenger and restricted express stop. Installations are sufficient for the loading and the unloading of cars.

Bridge. Over the Kiesel Bach, an affluent of the Moselle. Bridge No. 189. The line leaves the highway.

Cut. Length, 150m.

Fill. Length, 150m.

Station at Garsch. Receipt building to the left. Telegraph office. Cattle-loading platform. The line follows the highway again on a separate roadbed.

Bridge. Over the Warpig Bagg. Bridge No. 190.

Stop at Kechingen.

Station at Kattenhofen. Receipt building on the right. Post-office. Telegraph office. Sliding approach ramps.

Culvert. Over the Tensch Bach. Masonry bridge. One arch. Bridge No. 191.

Cut. Length, 200m.

Culvert. Over the rau. de Sentzich. Masonry bridge. One arch. Bridge No. 192.

For continuation, see Longwy Southeast.

Line: Thionville to Yutz-Bassee

Single-track, narrow-gauge; 1m spacing. Electric traction; length, 2.7m. The line runs along the roadbed of the Diedenhofen-Saarlouis highway. Operated by the Lothringische, Eisenbahnen Akt. Ges., whose offices are in Berlin, 28 Potdamerstrasse.

Stop at Diedenhofen (station belonging to the State).

Over-grade crossing. Line from Metz to Luxembourg and Audun-le-Roman to Diedenhofen. Metal bridge. One span giving passage to seven tracks. Bridge No. 186.

Stop at the Cavalry Barracks.

Stop at the Porte de Saarlouis (Saarlouiser Tor).

Stop at the Workmen's Settlement (Kolonie).

Stop at the Rue de Moselle (Moselstrasse).

Stop at Limburg Road (Limburgerweg).

Stop at the Place de l'Eglise.

Stop at Mackenhofen.

Line: Thionville to St. Francois

Single-track, narrow-gauge; 1m spacing. Electric traction; length, 2.2km. The line runs upon the roadbed of the Diedenhofen-Mondorf highway. It is operated by the Lothringische Eisenbahnen Akt. Ges., whose offices are at Berlin, 28 Potsdamerstrasse.

Stop at Diedenhofen (station belonging to the State).

Stop at the Place du Marche (Marktplatz).

Stop at the Porte de Luxembourg (Luxembourger Tor). Cattle-loading platform.

Stop at the Rue de l'Empereur Charles (Kaiser-Karl-Strasse).

Stop at St. Franz. Siding from the narrow-gauge electric line to the steam line from Diedenhofen (Beauregard) to Mondorf.

Line: Fontoy to Thionville

Narrow-gauge line running along a highway. Electric traction. Serves the valley of the Fentsch and the following places: Fentsch, Kneuttingen, Hayingen, Florchingen, Diedenhofen, with branches from Kneuttingen to Algringen, (approximately 2km) and from Florchingen to Fameck (3.5km).

This line was built by the Lorraine R. R. Co. (Lothringische Eisenbahnen Akt. Ges.) and was first operated May 8, 1912.

ROADS

The roads and highways of this section of France are divided into five classes and are shown on the accompanying map as follows:

(I) *National Roads* (Routes Nationales or R. N.).—Indicated by a double red line and marked R. N. No. 3 for example. The width of the road between ditches is from 10m to 12m (33 ft. to 40 ft.). The width of the paved portion is from 5m to 6m (16 ft. to 20 ft.), but is generally 5m.

(II) *Department Roads* (Routes Departmentales or Rtes. Deples.).—Indicated by a single heavy red line and marked D. No. 10 or G. C. D. No. 10 for example. The width of the road varies from 8m to 11m (26 ft. to 36 ft.) between ditches, but is generally 10m (33 ft.). The width of the pavement varies from 4m to 6m (13 ft. to 20 ft.).

(III) *Roads of Important Communications* (Chemins de Grande Communication) (Chins de Gde. Com.).—Indicated by a single heavy red line and marked G. C. No. 10 for example. Width between ditches, 8m (26 ft.); width of paving, 4m to 5m (13 ft. to 16 ft.). For the purpose of this information and the accompanying maps, no distinction has been made between No. 2 and No. 3, the only difference seeming to be the width of the paving. Numbers of these roads are the same as the Department Roads from which they are made. Thus Dept. Road No. 1 (Rte. Deptle No. 1) comes from Chin. de Gde. Com. No. 1 bis.
from Chin. de Gde. Com. No. 1 bis.

(IV) *Country Roads* (Chemins d'Interet Commun) and *Local Roads* (Chemins Vicinaux). Width between ditches, 6m (20 ft.); width of paving, 3m to 4m (10 ft. to 13 ft.). Indicated by a single light red line; on the French maps by two full lines close together.

(V) *Ordinary Roads.*—No account of such roads is given herein. They consist of farm and forest roads and are indicated on the French map 1:50,000 with single lines or double lines, one of which is dotted.

Lorraine

Detailed information regarding the roads in Lorraine is not available. The details of the size and importance of roads, as shown on the map are taken from the Carte Michelin, an automobile map on a scale of 1:200,000. This set of maps is a continuation of the same map for France, and in general it can be assumed that roads of similar designation are similar in character to those in France.

Data on road bridges are also lacking. Bridges on roads where shown on map are so designated as to position on German maps, but no data otherwise is available. Information as to road bridges when they occur over an important stream, canal or railroad is, however, given.

Road information on the French section of the quadrangle follows:

R. N. No. 52 Bis.

This road crosses the southwest corner of the quadrangle. This road has macadam width of 5m to 7m (16 ft. to 23 ft.) and between ditches, 8.5m to 12m (28 ft. to 40 ft.). For more complete data on this road, see Metz Southwest.

R. N. No. 52, Metz-Longwy

This road enters the quadrangle near Brehain-la-Ville in the northwest, runs through Foulay to the Moselle, and leaves the quadrangle near Mondelange. Description for portion in France shows the road as having macadam width of 6m to 8m (20 ft. to 26 ft.) and between ditches, 10m to 12m (33 ft. to 40 ft.) For grades, etc., in another quadrangle, see Longwy Southwest.

The R. N. roads running north, east and south from Thionville are probably of construction equal to either R. N. No. 52 or R. N. No. 52 bis, but no description record of these is available. The road running from Thionville Southeast through Metzerwisse is assumed from automobile map information to be a G. C. D.

I. C. No. 13

Macadam width, 4m to 5m (13 ft. to 16 ft.); between ditches, 6m to 8m (20 ft. to 26 ft.).

Branches northwest from Avril.

Grade of 6% for 350m on the road going northwest from Avril.

Grade of 6% for 400m near Brabant.

Grade of 6% for 80m to 100m near the line from Charleville to Thionville.

Narrow section of the road between Audun-le-Roman and Serrouville.

Narrow section of the road entering Serrouville.

Grade of 7% to 10% with sharp curve for 500m leaving Serrouville.

Grade of 6% to 7% for 300m to 400m beyond rau. Crusnes.

Grade of 5% for 240m between R. N. No. 52 bis and Tiercelet.

Branch No. 9: From Avril to the Frontier

Grade of 5% to 6% for 1,450m ascending the hill of Perrolin.
Culvert with 3m span and 4m width over the rau. Chevillon.

I. C. No. 13 (CONTINUED)

Branch No. 10: From Trieux to the Frontier

Grade of 8% to 10% for 100m in front of the farm of Sart.

I. C. No. 14

Macadam width, 3.5m to 4m (11.5 ft. to 13 ft.); between ditches, 5.5m to 8m (18 ft. to to 26 ft.).

Grade of 7% to 8% for 300m entrance to Mairy.
Narrow section of road leaving Tucquegnieux.
Grade of 6% to 7% for 200m to 300m near the mine shaft.
Grade of 5% to 6% near the future station of Tucquegnieux.
Grade of 8% to 10% for 100m territory of Trieux.
Grade of 8% to 10% for 150m leaving Anderny.
Narrow section of road entering and leaving Malavillers.
Grade of 10.5% to 12% for 150m leaving Malvillers.
Grade of 7% to 9% for 300m leaving Mercy-le-Bas.
Grade of 8% to 10% beyond Mercy-le-Bas.
Grade of 7% to 10% for 150m with narrow section and sharp curve entering St. Supplet.

TOWNS AND VILLAGES.

The following list comprises all the towns and villages in the quadrangle, the location upon a road or roads, the streams, if any, upon which the town is situated, the population and the number of houses. There is also included the coordinates of the place based upon the French system, where possible. The zero of this system lies southwest of France and the coordinates are all plus to the east and north. In this table, the easting is given first and the northing second.

Name of Town or Village.	Roads.	Stream.	Coord. E.	Coord. N.	Pop.	Houses.
Algrange			377	286	5,230	285
Amneville		Orne	383	276	62	11
Anderny	I. C. 14		365	283	292	104
Angevillers			377	289	591	109
Anoux			364	277	457	143
Audun-le-Roman	I. C. 13		366	287	529	129
Aumetz	R. N. 52		370	292	1,474	209
Avril	I. C. 13		371	278	533	149
Basse Ham	R. N.	Bibiche	392	288	692	117
Basse Guenange		Moselle	387	278	547	129
Bassompierre			371	289	124	30
Beauregard	R. N.	Moselle	385	285	899	70
Bertrange			387	280	226	65
Bettainvillers			367	279	262	59
Beuvillers	I. C. 13		368	289	253	62
Beuvange-sous-St. Michel			380	287	361	71
Blettange		Moselle	388	276	83	26
Boulange			371	276	330	126
Boussange			384	276	131	40
Bousse			388	277	328	80
Boust			388	294	465	101
Brhain-la-Ville	R. N. 52		366	295	235	66
Budange			383	278	382	94
Bure			374	292	108	26
Cattenom			392	291	784	220
Clouange			381	275	451	70
Crusnes	R. N. 52		368	294	323	82
Daspich		Moselle	385	282	14	1
Distroff			393	283	809	115
Ebange			384	282	399	87
Elange			395	286	339	74
Elzange		Canner	382	287	145	28
Entrange			382	292	367	68
Errouville	I. C. 13		367	292	248	77
Erzange	R. N. 52	Fensch	380	281	670	76
Escherange			379	292	479	112
Fameck			382	279	1,206	301
Florange		Fensch	383	282	1,804	301
Fontoy	R. N. 52	Fensch	374	285	1,945	272
Garsch			389	290	779	193
Gandrange			383	276	609	92
Gavisse			395	293	301	77
Guelange			390	278	68	29
Guentrange			384	287	144	43
Haute Guenange		Moselle	388	278	273	53
Haute Ham		Moselle	390	288	232	60
Haute Yutz	G. C. D.		289	284	539	90
Havange	R. N. 52	Fensch	374	289	392	81
Hayange	R. N. 52		378	282	8,510	898
Hettange Grande	R. N.	Kissel	385	291	1,191	340

Name of Town or Village.	Roads.	Stream.	Coord. E	Coord. N.	Pop.	Houses.
Illange			387	282	369	91
Imeldange			388	280	260	79
Inglange		Canner	396	284	217	51
Kanfen			382	295	512	10
Kirsch-les-Luttange			394	277	59	16
Koeking			390	290	290	84
Koenigsmacher	R. N.	Moselle	394	290	1,132	299
Knutange	R. N.	Fensch	377	284	3,445	320
Kuntzich			391	284	469	112
Lommerange	I. C. 13		372	283	193	48
Ludelange	R. N. 52		391	284	469	112
Macquenom		Moselle	388	286	765	75
Mairy			364	280	405	122
Malavillers	I. C. 15		365	286	156	51
Malgrange			386	287	168	43
Malling		Moselle	396	293	398	92
Mance			368	276	291	90
Mancieulles			366	278	158	38
Manom		Moselle	388	287	1,118	208
Marspich			380	283	805	123
Metrich	R. N.		396	290	210	78
Metzervisse	G. C. D.		394	281	726	138
Molvange			380	293	158	39
Mondelange	R. N.		386	275	233	58
Montrequienne			391	274	168	54
Morlange			380	280	112	39
Moyeuvre-la-Petite			375	275	429	97
Neufchef			376	281	687	155
Nilvange		Fensch	377	284	2,267	304
Nondkail			375	293	180	57
Oeutrange			382	290	696	161
Ottange			375	295	2,310	328
Petite Hettange			396	291	125	37
Ranguevaux			378	279	848	197
Remange			391	280	141	49
Richemont	R. N.	Moselle	386	277	1,255	219
Rochonvillers			376	292	283	64
Rurange			391	277	312	82
Sancy			368	285	450	124
Schremange	R. N.	Fensch	382	281	1,196	173
Sentzich			393	292	516	119
Serrouville	I. C. 13		366	290	587	189
Soetrich	R. N.	Kissel	386	292	322	76
St. Francois	R. N.		386	287	241	49
Stuckange	G. C. D.		391	282	210	60
Terville			384	284	723	115
Thionville	R. N.	Moselle	386	285	10,062	826
Tressange			373	291	439	80
Trieux	I. C. 13		368	282	258	103
Tucquegnieux	I. C. 14		365	279	396	95
Uckange	R. N.	Moselle	386	279	2,088	210
Valmestroff			393	286	153	44
Veymerange			382	285	342	62
Vitrey-sur-Orne			382	275	2,258	281
Volkrange			380	286	845	144
Volstroff			393	280	401	95
Yutz Basse	R. N.		388	286	3,601	366

METZ NORTH-EAST

DATA ON BRIDGES

In the following list of bridges, the enumeration has been based upon the idea of designating a bridge in thr ways, as follows; (a) as being over an important stream, road, or railroad; (b) as being on a railroad; (c) as being o highway or road. In this list the bridges on important streams are given first, then follow those upon railroads, a finally those upon roads are given in the order of their importance. This results in a bridge being noted twice, a sometimes three times. Where such duplication of record occurs, reference is made to the preceding item numbe for the same bridge. Bridges are designated in the list by item numbers. All dimensions are given in meters

SHEET	INDEX NO ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				
				NEAREST TOWN	OVER	PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
1		Down the Valley of the Moselle	Road - Bousse-Mondelange	Blettange	Moselle	3-54.28	168.0	8.5	5.5	Arranged to be mine Metal. Masonry Piers.
2		"	Railroad - Metz-Thionville - Luxembourg.	Beauregard	"	5-25.0	145.0			SAME AS #75 Arranged to be min Metal. Masonry Piers and A bu
3		"	Road - Thionville-Metzervisse	Thionville	"	5-22.5	127.5	10.0		Masonry. Arranged to be ra
4		"	Railroad, Metz-Thionville-Luxembourg.	"	"	5-25.0	145.0			SAME AS #71 Arranged to b Metal. Masonry Piers and Hou
5		"	Road, Malling-Metrich.	Malling	"	3-40.0	123.0	6.0		Masonry. Arranged to be mine
6		Down the Valley of the Orne	Footpath to Grandrange	Grandrange	Orne					Footbridge in bad condition
7		"	Railroad, Metz-Thionville-Luxembourg.	Richemont	"	5-10.38 2-3.0				SAME AS #56 Masonry skew
8		"	Road, Metz-Luxembourg	"	"	5-10.38	60.75	7.5		Masonry
9		Down the Valley of the Kissel	Railroad, Metz-Thionville-Luxembourg	Hettange Grande	Kissel					
10		"	Road, Metz-Luxembourg.	"	"	1-8.0		8.0		SAME AS #81 Masonry
11		"	Railroad, Metz, Thionville-Luxembourg.	La Grange	"	1				Masonry
12		"	Road, Thionville-Cattenom.	Garsh	"	1-8.0				SAME AS #86 Masonry
13		"	Road, Manom-Cattenom	"	"	1-8.0				Masonry
15		Down the Valley of the Fensch	Road, Metz-Longuyon	Gourstthal	Fensch.	1-3.0				Masonry.

G. H. Q. - A. E. F.

SHEET	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					MET BRI
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	
16		Down the Valley of the Fensch	R.R. Audun le Roman Thionville	Knutange	Fensch	1-22.0 18-15.0				Same as #97 Masonry. Max. ht 24.5m.	Arrang be
17		"	Local Road	Nilvange	"					Wood	
18		"	"	"	"					"	
19		"	"	"	"					"	
20		"		Hayange	"					Stream covered opposite blast fur	
21		"	Local Road	"	Branch of Fensch at Blast Furnaces	2				Masonry	
22		"	Town Streets	"	Fensch					2 bridges. No details	
23		"	Roads	"	Branch of Fensch at Gas Works.					" " " "	
24		"	Connecting Road	Chateau le Wendel	Fensch					3 Masonry Bridges	
25		"	"	Suzange	"	1				Masonry	
26		"	R.R. Ebange-Hayange	"	"	1				SAME AS #179 Masonry	
27		"	Connecting Road	Schremange	"	1				Masonry	
28		"	R.R. Ebange-Hayange	Florange	Mill Canal of Fensch	1				SAME AS #177 Masonry	
29		"	Town Streets	"	Fensch	1 each				2 Masonry Bridges	
30		"	Connecting Road	"	"	1				Masonry	
31		"	R.R. Ebange-Hayange	"	"	1				SAME AS #176 Masonry.	
32		"	Road - Daspich - Terville	Daspich	Vieille Fensch and Fensch	1				Masonry	
33		"	R.R. Ebange - Hayange	"	Vieille Fensch	1				SAME AS #175 Masonry	
34		"	R.R. Metz-Luxembourg	"	Fensch	1-8.0				SAME AS #73 Masonry	
35		"	R.R. Thionville - Longuyon	Terville	"	1				SAME AS #107 Masonry	
36		"	R.R. Beauregard - Metzange	"	"					SAME AS #184	

G. H. Q. - A. E. F.

			SITE OF BRIDGE		DETAILS OF BRIDGE		

ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					ME
				NEAREST TOWN	OVER	PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	BRI
37		"	Road. Terville - Gassion	Terville	Fensch	1				Masonry	
38		"	Road. Terville - Beauregard	Beauregard	"					"	
39		"	Road. Metz - Thionville	"	old bed of Fensch	1-8.0				"	
40		"	Road. Thionville - Volkrange	"	Fensch	1				"	
41		Down the Valley of the Bibiche	Road. Luttange - Récrange	Kirsch-les-Luttange	Bibiche					Wood	
42		"	Road Bousse Metzeresch	"	"					Masonry	
43		"	Road. Haute-Guenange - Metzervisse	Metzervisse	"		4.0	6.0		"	
44		"	Road. Stuckange - Metzervisse	"	"					"	
45		"	Road. Stuckange - Inglange	Distroff	"	1-6.0		5.0		"	
46		"	Local Road	"	"	1-7.0				"	
47		"	R.R. Thionville - Volklingen	Kuntzich	"	1-15.3				SAME AS #127 Masonry	
48		"	Road. Kuntzich - Valmestroff	Valmestroff	"						
49		"	Road. Haute-Ham - Valmestroff	"	"						
49A		"	RR. Thionville - Malling	Basse-Ham	Branch of Bibiche					SAME AS #115	
49B		"	"	"	"					SAME AS #116	
50		"	Road. Sierck - Thionville	"	West Branch of Bibiche	1		10.0		Masonry	
51		Down the Valley of the Canner	Road. Inglange - Distroff	Inglange	Canner	1-6.0		6.0		"	
52		"	Road Elzange - Koenigsmacker	Elzange	"	1-6.0		3.0		"	
53		"	Road. Sierck - Thionville	Koenigsmacker	"	1-8.0		10.0		"	
54		"	Road to Station, Koenigsmacker	"	"	1				"	
55		"	R.R. Thionville - Malling	"	"	2-3.6		7.5		SAME AS #117 Metal. Masonry piers and abuts	

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ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					METZ
				NEAREST TOWN	OVER	PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	BRIDGE
56		Railroad - Metz-Thionville-Luxembourg	Double Track	Richemont	over Orne R.	5-10.38 2-3.0	65.3			SAME AS "7 Masonry Skew.	Arrange be mi
57		"	"	"	over Canal	1-6.0				Masonry	
58		"	"	"	under Footbridge					Metal	
59		"	"	"	over Small Stream	2-3.0				Masonry	
60		"	"	Uckange	" " "	2-1.6				"	
61		"	"	"	" " "	2-2.0				"	
62		"	"	"	under Road, Uckange-Fensch	2-30.0			6.0	Metal	
63		"	"	"	over Small Stream					Culvert	
64		"	"	Ebange	" " "					Masonry	
65		"	"	"	under Footbridge						
66		"	"	"	under Local Road					Metal	
67		"	"	"	over la Vieille Fensch R.	1-8.0				Masonry	
68		"	"	"	over old bed of Fensch R	1-8.0				"	
69		"	"	"	R.R over R.R. junction					"	
70		"	"	"	R.R under RR. connecting track	3-25.0				SAME AS "174 Metal Skew.	
71		"	"	"	over road to Terville						
72		"	"	"	under RR, Audun-le-Roman-Thionville	3	45.0	16.0		SAME AS "110 Metal skew. Masonry piers and	
73		"	"	"	over Fensch R.		4.0			SAME AS "34	
74		"	"	Thionville	over Road, Metz-Thionville	2				Metal. Masonry piers and a	
75		"	"	"	over Moselle R.	5-25.0	145.0			SAME AS "2 Metal. Masonry piers and abu	Arranged by
76		"	7 Tracks	"	over Road, Thionville to Sarrelouis, and single track Railroad	1				SAME AS "186 Metal	

G.H.Q. - A.E.F.

ITEM	INDEX No. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE NEAREST TOWN	SITE OF BRIDGE OVER	DETAILS OF BRIDGE PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	METZ. BRIDG
77		Railroad. Metz-Thionville-Luxembourg	Double Track	Thionville	over Moselle R.	5-25.0	145.0			SAME AS #4 Arranged to be Metal. Masonry piers and abut	
78		"	"	"	over Small Stream					Culvert	
79		"	"	"	" " "					"	
80		"	"	"	over Road, Cattenom - Thionville, and a Narrow Gage Railroad	1-7.0				SAME AS #188 Metal skew	
81		"	"	Hettange-Grande	over Kissel R.	1-8.0				SAME AS #9 Masonry	
82		"	"	"	over Road Hettange-Grande - Garsch		4.0				
83		"	"	"	under old Roman Road	1-10.0				Masonry	
84		"	3 Tracks	"	under Road to Hettange-Grande	1-12.0				Metal	
85		"	3 Tracks	"	under Road, Metz-Luxembourg	1-12.0				"	
86		"	Double Track	"	over Kissel R	1-5.0				SAME AS #11 Masonry	
87		"	"	"	under Road, Kaufen-Soetrich						
88		"	"	"	over Small Stream.					Culvert	
89		"	"	"	over Road, Kaufen to F^{e} d'Immerhoff			4.0			
90		"	"	"	over small stream and local road		4.0				
90A		"	"	Kaufen	under Road, Kaufen - B. de. Kaufen.	1-12.0				Masonry	
91		Railroad. Charleville-Audun-le-Roman-to German frontier	"	Sancy	over Ravine and Footpath	1-12.0				Masonry.	
92		Railroad. Audun-le-Roman - Thionville	"	1 km from Fontoy	Rau. de Mill of Moyeuvre					Culvert	
93		"	"	Fontoy	over Local Road					Metal. At exit from Station	
94		"	"	"	over Road to Lommeringen						
94A		"	"	"	over Road to Forest of Treches						
95		"	"	Haut-Pont	over Road to mine Carl Lueg			4.0			

G. H. Q. - A. E. F.

ITEM	INDEX NO. ON MAP	ROUTE Road Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE NEAREST TOWN	SITE OF BRIDGE OVER	DETAILS OF BRIDGE PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	METZ-BRIDGE
96		Railroad, Audun-le-Roman-Thionville	Double Track	Near Knutange	over Local Road			4.0			
97		"	"	Knutange	over Fensch R. and Road, Metz-Longwy	1-22.0 18-55.0				SAME AS #16 Masonry. Max. ht 24.5m	Arrange be m
98		"	"	"	under Local Road	1				Metal	
99		"	"	"	over Road, Knutange-Nilvange						
100		"	"	Hayange	over Road to mine at Marspich						
101		"	"	"	over Road, Hayange-Marspich	1-8.2	10.0			Metal Dk. Pl. Girder on Masonry Abu	
102		"	"	"	Private Road						
103		"	"	"	under Road Schremange-Bettange						
104		"	"	Florange	over small stream		4.0			5 Culverts	
105		"	"	"	over Road, Schremange-Bettange						
106		"	6 Tracks		over Road, Florange-Terville						
107		"	6 "	"	over Fensch R.	1				SAME AS #35 Metal	
108		"	Double Track	Thionville	over single track standard gage Railroad					SAME AS #183	
109		"	"	"	over Local Road						
110		"	"	"	over Railroad, Metz-Luxembourg	3	45.0	16.0		SAME AS #72 Metal. Masonry piers and abut	
111		"	"	"	over Branch of Fensch R.					SAME AS #181	
112		Railroad Thionville-Malling	"	"	Railroad over Moat of the Fortification	3-12.0				Metal skew. Masonry piers and	
113		"	"	Basse-Ham	over Local Road	1-4.0				Metal	
114		"	"	"	over Helpert Bach	1-4.0				"	
115		"	"	"	over Branch of Bibiche R.	1-6.7				SAME AS #49A Metal. Masonry Abuts.	
116		"	"	"	"	1-6.7				SAME AS #49B Metal. Masonry Piers and A	
117		"	"	Koenigsmacker	over Canner R.	2-3.6		7.5		SAME AS #55 Metal. Masonry Piers and Ab	

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ITEM	INDEX NO ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF Road	SITE OF BRIDGE		DETAILS OF BRIDGE					METZ NE
				NEAREST TOWN	OVER	PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	BRIDGES
118		Railroad Thionville-Malling	Double Track	Koenigsmacker	over Small Stream					Culvert	
119		"	"	"	over 2 Local Roads	1-4.2				Metal	
120		"	"	"	over Small Stream de Metrich					Culvert	
121		"	"	Malling	under Road, Mettrich - Malling						
122		"	"	"	over Uderbacher R.	1-8.84				Metal	
123		"	"	"	over Branch of Uderbacher R.	1-4.9				"	
124		Railroad Thionville - Volklingen	"	Kuntzich	over Foot path.					"	
125		"	"	"	under Road, Kuntzich - Thionville			5.0			
126		"	"	"	under Local Road	1		4.0		Masonry	
127		"	"	"	over Bibicher and Local Road	1-15.3				SAME AS #47 Masonry	
128		"	"	"	over Irrigation Ditch	1-2.0				Masonry culvert.	
129		"	"	"	over Local Road.						
130		"	"	"	over Small Stream	1-1.0				Masonry culvert	
131		"	"	"	" " "					" "	
132		"	"	Distroff	over Road, Stuckange - Inglange	1-6.0				Metal girders, Masonry abut.	
133		"	"	"	over Small Stream	1-0.6				Masonry culvert.	
134		"	"	Metzervisse	under Road, Metzervisse - Distroff				7.0		
135		"	"	"	under Road, Thionville - Sarrelouis						
136		Railroad. Briey - Audun-le-Roman	Single Track	Mance	over Woigot R	3	46.08			Masonry	
137		"	"	"	over Local Road.			5.0		"	
138		"	"	Mancieulles	" " "			5.0		"	

G. H. Q. - A. E. F.

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ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					METZ NE BRIDGES -
				NEAREST TOWN	OVER	PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	
139		Railroad Briey to Audun-le-Roman.	Double Track	Mancieulles	under Road Tucquegnieux - Battainvillers			5.0		Masonry.	
140		"	Single Track	Tucquegnieux	over Local Road					"	
141		"	"	"	over Ravine	10	182.0			"	
142		"	"	"	over Road, Trieux - St. Supplet.			5.0		"	
143		"	Double Track	Sancy	under Road, Trieux to Audun-le-Roman			6.0		Reinforced Concrete	
144		"	"	"	under Road (I.C.) Ottange - Suzemont.			5.0		Masonry	
145		"	"	"	"			5.0		"	
146		"	Single Track	"	under Local Road			6.0		Reinforced Concrete	
147		Railroad Audun-le Roman - Hussigny	"	Audun-le-Roman	over Local Road			4.0		Masonry	
148		"	"	"	" " "			4.0		"	
149		"	Double Track	Serrouville	under Road (I.C. #16)			6.0		"	
150		"	Single Track	"	over Crusnes R		242.6			Arranged to be mine Metal Floor System. Masonry piers an	
151		"	"	"	over Road of Breham-la-Ville			4.0			
152		"	"	"	"			4.0			
153		"	"	"	"			4.0			
154		"	"	"	"			4.0			
155		Railroad Barencourt - Audun-le Roman	"	Anderny	over Local Road			5.0		Masonry	
156		"	"	"	over Ravine.	12	180.0			Masonry.	Arranged to be mine
158		Railroad Fontoy - Audun-le-Tiche	"	Fontoy	over Small Stream					Culvert	
159		"	"	"	" " "					"	
160			"	"	" " "					"	

G.H.Q. A.E.F.

ITEM	INDEX NO ON MAP	ROUTE Road, Railrodd Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					METZ NE BRIDGES
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	
161		Railroad, Fontoy - Audun-le-Roman	Single Track	Fontoy	over Local Road						
162		"	"	Boulange	over Small Stream					Culvert	
163		"	"	"	" " "					"	
164		"	"	"	under Road to Boulange						
165		"	"	"	over Small Stream					Culvert	
166		"	"	Ludelange	over Road Aumetz-Fontoy	1				Metal skew	
167		"	"	"	under Local Road.	1				Metal	
168		"	"	Aumetz	over Local Road						
169		Railroad Hayange - Batcandal	Double Track	Knutange	under Single Track Railroad to mine.					Skew crossing.	
170		"	"	Algrange	over Local Road						
171		"	Single Track	"	under Footbridge						
172		"	"	"	under Local Road						
173		"	"	"	over Local Road						
174		Railroad Ebange - Hayange	"	Ebange	R.R over R.R. connecting Fontoy-Thionville line	3-25.0				SAME AS #70 Metal skew	
175		"	"	"	over Vieille Fensch R	1				SAME AS #33 Masonry skew	
176		"	"	"	" " " "	1				SAME AS #31 Masonry skew	
177		"	"	"	" " " "	1				SAME AS #28 Masonry skew	
178		"	"	Florange	over Canal of Vieille-Fensch R.	1				Masonry	
179		"	"	"	over Vieille Fensch R	1				SAME AS #26 Masonry skew	
180		"	"	Hayange	RR. under RR from station to Blast Furnaces						
181		Railroad Beauregard - Metzange	"	Beauregard.	over Branch of Fensch R					SAME AS #35	

G. H. Q. - A. E. F.

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Σ	INDEX	ROUTE	DESCRIPTION	SITE OF BRIDGE	DETAILS OF BRIDGE	MET
	NO.		ROAD OR WATERCOURSE			

ITEM	INDEX NO. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					MET BRID
				NEAREST TOWN	OVER	PRIN. SPANS.	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	
182		Railroad Beauregard - Metzerage	Single Track	Beauregard	R.R over RR, Metz - Thionville - Luxembourg.	3	45.0	16.0		SAME AS #77 Metal Skew. Masonry piers and	
183		"	"	"	R.R. under R.R. Audun-le-Roman - Thionville.					SAME AS #108	
184		"	"	"	over Fensch R.					SAME AS #36	
185		"	"	Veymerange	over Branch of Veymerange R.						
186		Elevated R.R. Thionville - Nieder-Jeuts	Single Track Narrow Gage	Thionville	R.R. under RR, Metz Thionville Luxembourg	1				SAME AS #76 Metal	
187		Railroad, Beauregard - Mondorf.	"	Beauregard	over Branch of Fensch R.						
188		"	"	St. Francois	RR. under RR. Metz - Thionville - Luxembourg	1-7.0				SAME AS #80 Metal Skew.	
189		"	"	Garsch	over Small Stream						
190		"	"	"	" "						
191		"	"	Cattenom	" " "	1				Masonry culvert	
192		"	"	Sentrich	" " "	1				" "	
193	I.C. #13	Avril - Neufchef		Avril	Ruisseau Chevillon.	1-3.0		4.0			

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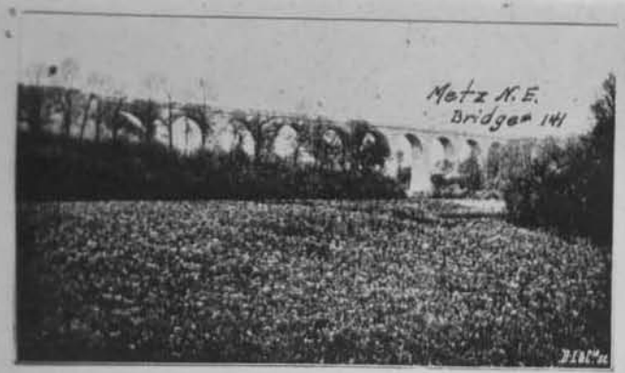
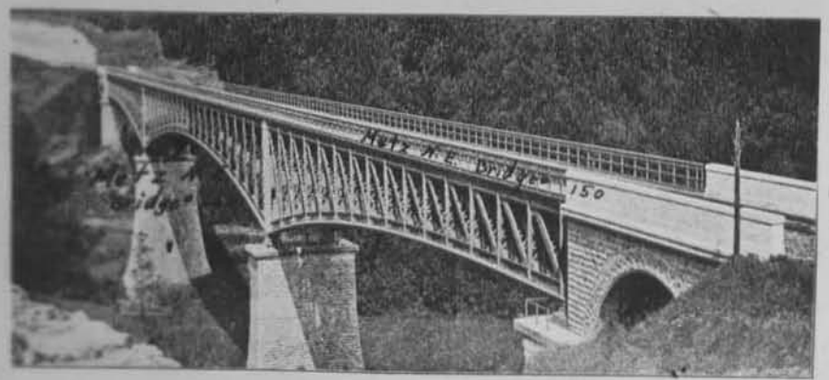
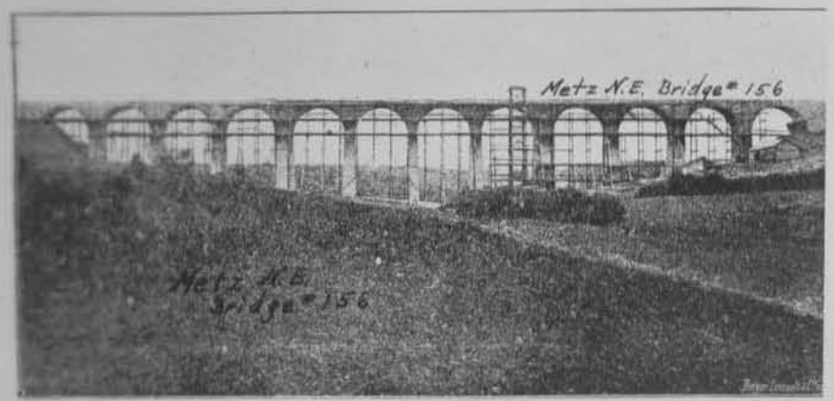


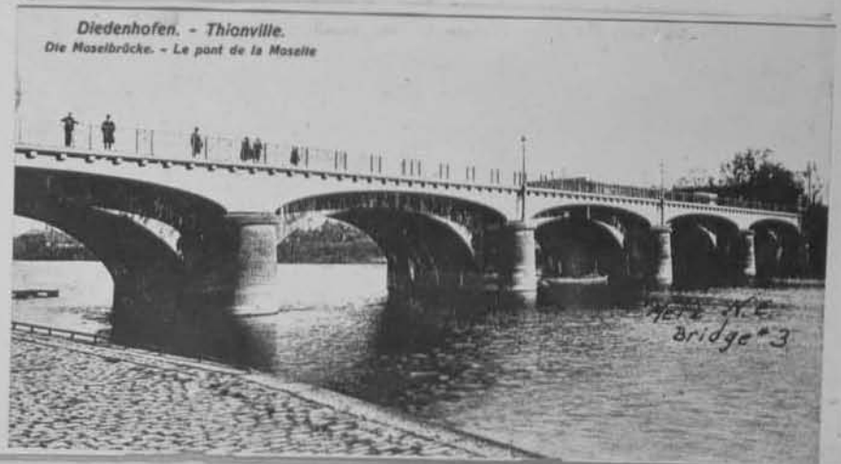
Viaduc de Brabant (ligne de Briey à Audun-le-Roman).



Viaduc de Serrouville (ligne d'Audun-le-Roman à Villerupt). (Voir page 63.)



Kneutingen - Knutange



G. H. Q. – A. E. F.
SECOND SECTION, GENERAL STAFF

MONOGRAPH
ON
WATERWAYS, ROADS, RAILROADS, AND BRIDGES

[9]

QUADRANGLE
SARREGUEMINES NORTHWEST

Printed at
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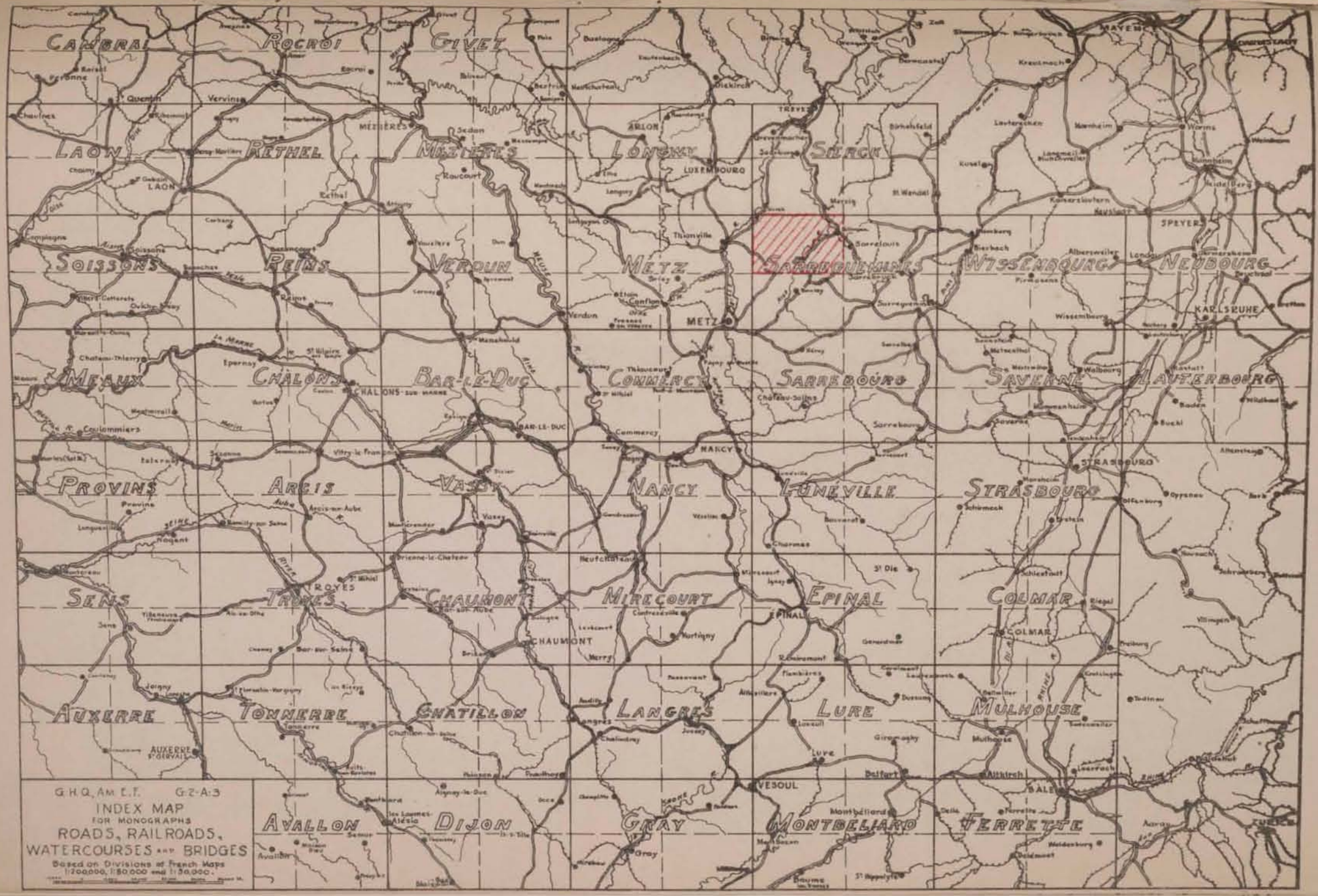
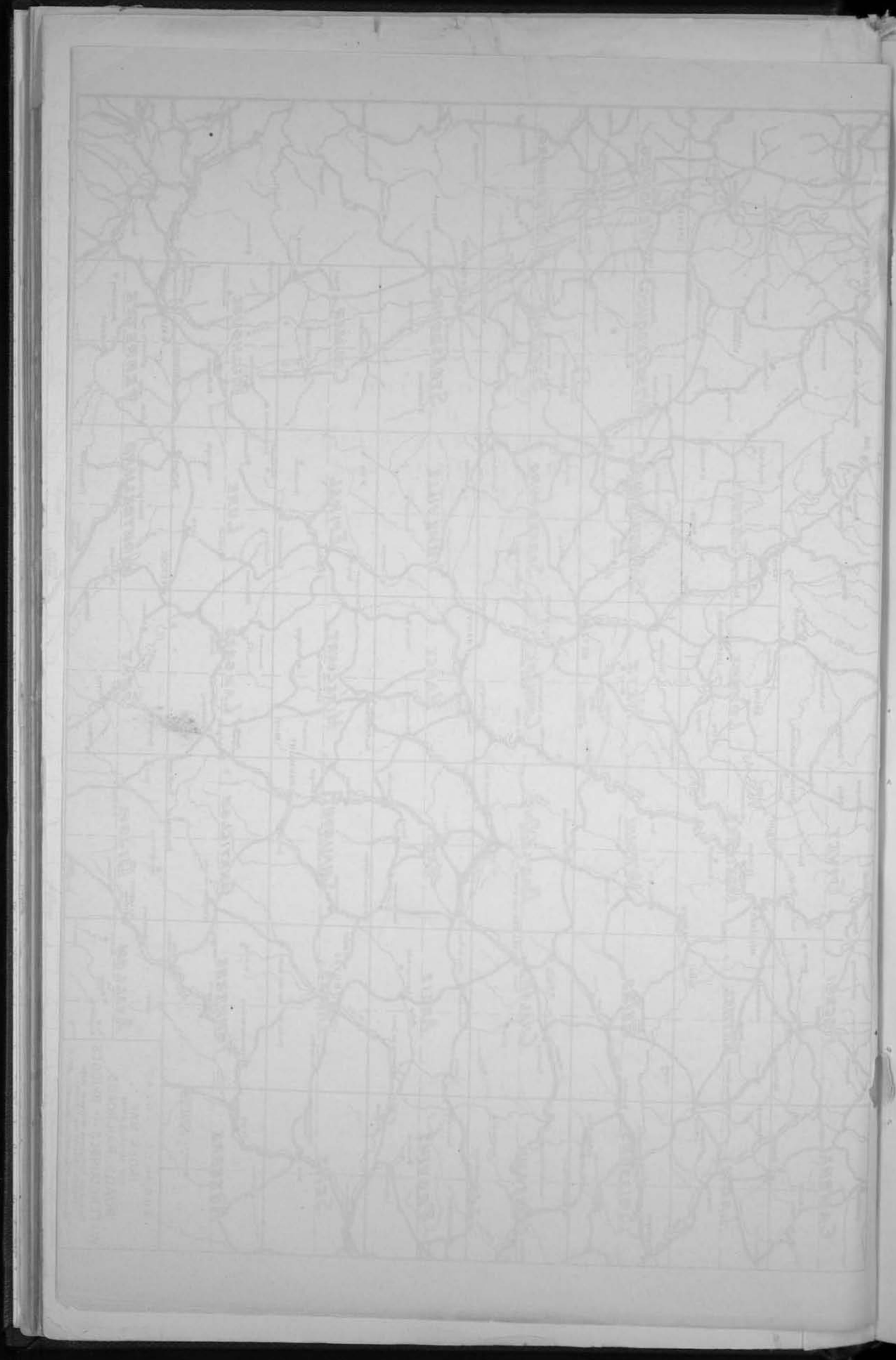
29TH ENGRS., U. S. ARMY
1918


CAMBRAI
ROCROI
GIVET
LAON
RETHEL
MEZIERES
LONGWY
SIERCK
SOISSONS
REIMS
VERDUN
METZ
SARREBOURG
WISSEMBOURG
NEUBOURG
MEAUX
CHALONS
BAR-LE-DUC
COMMERCY
SARREBOURG
SAVERNE
HAUTERBOURG
PROVINS
ARCIS
VASSY
NANCY
LUNEVILLE
STRASBOURG
SENS
TROYES
CHAUMONT
MIRECOURT
EPINAL
COLMAR
AUXERRE
TONNERRE
CHATILLON
LANGRES
LURE
MULHOUSE
AVALLON
DIJON
GRAY
MONTBELIARD
FERRETTE
G.H.Q. AM E.F. G-2-A-3
INDEX MAP
FOR MONOGRAPHS
ROADS, RAILROADS,
WATERCOURSES AND BRIDGES
Based on Divisions of French Maps
1:200,000, 1:80,000 and 1:50,000.



G. H. Q., A. E. F.
SECOND SECTION, GENERAL STAFF

U.S. Army. A.E.F., 1917-1920. General Staff, G-2.

MONOGRAPH ON WATERWAYS, ROADS RAILROADS, and BRIDGES

QUADRANGLE
SARREGUEMINES NORTHWEST

INDEX

MONOGRAPH

ON

WATERWAYS, ROADS, RAILROADS, BRIDGES.

TO

ACCOMPANY ROAD AND BRIDGE MAP.

SARREGUEMINES NORTHWEST.

EXPLANATION

The information herein contained relates in detail to the following subjects:

WATERWAYS
- Canals
- Rivers
- Important Creeks

RAILROADS
- Main Lines
- Secondary Lines
- Narrow Gauge Lines

VILLAGES, TOWNS AND CITIES

ROADS AND HIGHWAYS
- National Roads
- Department Roads
- Communal Roads

BRIDGES
- Highway Bridges
- Railroad Bridges
- Canal and River Bridges

The area covered in this monograph is included in the 1:50,000 scale map of the French government as shown on the index map included herewith and in the subdivision of the monograph. The 1:50,000 scale map is in turn a subdivision of the 1:80,000 and the 1:200,000 scale maps, upon which the various area sheets are named as shown upon the index map. The 1:50,000 scale map of roads and bridges which accompanies the monograph is named as a subdivision of the 1:80,000 scale map. Thus, Sarreguemines Northwest.

General information is given as follows for the area in question:

The nature and character of streams, lakes, ponds, etc.;
The nature and construction of the roads and connections;
The character and importance of railroads;
The villages, towns, cities.

Specific information is given as follows for the area in question:

Size of canals, dimension and number of locks with size and capacity of boats, etc.; rivers, their character, size, fords, etc.
Railroads, number of tracks, clearance, roadbed, grades, cuts and fills, etc.
Roads, width, grade, width and nature of pavement.
Bridges: location as to stream, railroad or highway; number of spans, class of construction, width of highways, etc. Photographs where possible.

Bridge information is given as follows:

(a) as being over an important stream.
(b) as being on a railroad.
(c) as being on a highway.

In this way most bridges appear twice and are cross indexed. Location of bridges is shown upon maps and in the case of cities, a larger scale map is given showing bridges.

Strength of Bridges. No data is available as to the strength of bridges. Railroad structures will probably carry any load coming on them from ordinary traffic. When any load is heavier than the engine concentration, the bridge should be examined.

Highway bridges of masonry will probably carry any load up to 12 tons on one axle. Heavier loads should be distributed if the filling of earth over the arch ring is less than one foot deep. No statement can be made as to the strength of metal bridges as they vary as to design and material. As a rule, the older ones were designed for light loads.

SUPPLEMENT

As additional information is obtained it will be issued as a supplement to this monograph. When using this monograph, always examine the supplement.

Sources of Information

Maps of the area, either French or German.

Notices of Departments or of foreign regions issued by the Ministre de la Guerre, Commission de Geographie du Service Geographique de l'Armee.

Guide books, photographs, etc.

Abbreviations

Abut., abutment
C. I., cast iron
Met., metal
Mas., masonry
Timb., timber
Br., bridge
Riv., river
Rau., ruisseau (small stream)
M. & M., Meurthe and Moselle.
R. N., Route nationale
G. C. D., Department or important road
Canl., canal
I. C., Communal or country road.

Table of French and German Terms With English Equivalents

Bois	Woods	Wald
Canal	Canal	Kanal
Canton	District	Gebiete
Chemin	Road	Weg
Chemin de Fer	Railroad	Eisenbahn
Cheveaux	Horses	Pferde
Citerne	Tank	Behalter
Commune	Township	Gemeinde
Droit	Right	Recht
Est	East	Ost
Etang	Pond	Teich
Ecluse	Lock	Schleuse
Embrachement	Branch	Abzweigung
Exploitation	Working	Arbeits
Ferme	Farm	Hof
Fleuve	River	Fluss
Gauche	Left	Links
Genie	Engineer (military)	Pioneer
Grande Communication	Main Communication	Hauptverbindung
Gue	Ford	Furt
Hauteur	Height	Hoehe
Kilogramme	Kilogram	Kilogram
Kilometre	Kilometer	Kilometer
Longeur	Length	Laenge
Largeur	Width	Breite
Metre	Meter	Meter
Mont	Hill	Hugel
Maison	House	Haus
Nord	North	Nord
Ouest	West	West
Overture	Opening	Oeffnung
Pont	Bridge	Bruecke
Passage Inferieur	Undergrade Crossing	Weg unter den Eisenbahn Linien
Passage a Niveau	Grade Crossing	Bahnkreuzung
Passage Superieur	Overgrade Crossing	Weg ueber den Eisenbahn Linien
Ruisseau	Brook	Bach
Riviere	Creek	Strom
Sud	South	Sud
Source	Spring	Quelle
Voiture a 2 Roues	2-Wheeled Wagon	Waggon mit 2 Raedern
Voiture a 4 Roues	4-Wheeled Wagon	Waggon mit 4 Raedern

DESCRIPTION

The area of the quadrangle is divided into two parts by the Lorraine Rhine Prussia border, about two-thirds of which lies on the Lorraine side. Along the valleys of the Sarre and the Nied are found wide meadows and very shallow small streams and irrigation ditches. A small portion of the meadow lands adjoining small streams is somewhat marshy. The remaining area contains low hills, varying in height from 10m. to 50m. (33 to 164 feet) above valleys, many of the hills are covered with forests. There are no especially large towns nor any railroad centers of special importance. The importance of the streams and railroads can be best obtained under the detailed description of those two subjects.

WATERWAYS

The Sarre

The Sarre River rises in the northern Vosges, flows northwesterly for a distance of 237km. to Conz in Sierck N.W. where it enters the Moselle River. It enters the quadrangle near the town of Beaumarais on the east and leaves at Meckring on the north. Its valley is wide, its course winding and the stream is skirted by meadows as far north as Relling. The stream width is 70m. with a bed of sand and gravel. The three bridges crossing the stream are 180m., 86m. and 240m. in length. The fall is gentle, being from 0.2m. to 0.35m. per km.; the current slow during average and low water stages.

North from Relling, the valley is narrowed between limestone hillsides and does not widen until after leaving the quadrangle between Meckring and Merzig.

The rise and fall of the Sarre, although regulated by the canalization up stream from this quadrangle, is quite variable. The low waters in summer are very pronounced and last from June until September; the high waters occur in the winter and spring from December to March. The rises are very rapid and are generally produced by melting snow and the winter rains.

The canalization of the stream begins at Ensdorf, a short distance up stream from this quadrangle, and extends up stream from that point. The traffic below Ensdorf has been much less than that above because a depth of 1.2m. (3.9 ft.) has not been attained and for this reason the 150-ton boats cannot ascend the river fully loaded. The traffic on this stream has gradually diminished due to insufficient depth at low water and is entirely stopped for one and a half months during the winter.

Features along the stream course:

Beaumarais. Trail ferry.

Waldevrange. Trail ferry.

Patten. Small boat and ferry for vehicles opposite Biren.

Fremestorff. Small boat and ferry for vehicles opposite station.

The bridges are listed under that heading.

The Nied

The Nied River is formed at Conde Northen, at about the center of Sarreguemines S.W., by the junction of the French Nied and German Nied. It enters this quadrangle near Holling on the south and flows in a northeasterly direction, crossing the Lorraine-Rhine Prussia line near Nied Altdorff. It empties into the Sarre near Relling. Its valley is wide. The stream generally fordable in summer time is bordered by low meadows, cut by drainage and irrigation ditches. The banks are so low that the water often overflows them and spreads out for a considerable distance, making approach to the stream very difficult. Poplar and willow trees line the banks. The stream has a width of from 25m. to 30m. and a depth of 2m. to 4m. (6.5 to 13 ft.).

Features along the stream course:

Bouzonville. Foot bridge across the point of island; could be used by cavalry, single file. Ford to the east of large bridge, with depth during low water of 0.6m. (2ft.).

Heckling. Foot bridge is submerged during floods. Ford 1800m. below Bouzonville with depth 0.5m. (1.6 ft.). Below Heckling there is a very narrow section of the valley with the stream very deep.

Filstroff. Stone dam 60m. above mill. Ford below bridge practicable at ordinary water stages. Ford 50m. below bridge has depth at low water of 0.5m. (1.6 ft.).

Guerstling. Ford 600m. above village; depth 0.5m. to 0.6m. (1.6 to 2 ft.). Ford immediately below bridge practicable at ordinary water stage. Mill with stone dam near the bridge.

The bridges are listed under that heading.

The Ruisseau Anzeling

In its upper reaches this stream is called the Ihrabach and in its lower the Collerbach. Rises S. of Margetheth and joins the Basse-Nied to the S.E. of Anzeling. Total length 14.5km. Bridges: Three at Monneren, two at Menskirchen, one at Neu-Schemerich, one at Alt-Schemerich, one at Hebling, two at Edling, three at Anzeling, one of which is a masonry

arch of 8m. opening for the Courcelles-Saargemund R.R. (bridge No. 50 and 74). The Anzeling receives the rau. Piblange which is crossed by the Diedenhofen-Volklingen line on a masonry arch of 4m. opening, (bridge No. 47).

The Ruisseau Gogelfang or Hettembach

Rises to the north of Lausnstroff and joins the Basse-Nied to the north of Niedwelling in Prussia. It enters Prussia 1km. above Niedwelling. Total length 17km. Eleven bridges: Two at Launstroff, one at Gongelfang, one at Flatten, two at Waldwisse, two at Zenringen, one at Colmen, one at Neunkirchen, one at Remeldorf. It receives: (1) the rau. of Waldwisse, right bank, coming from Kalenburg and joining it at Colmen (length 10.5km., six bridges); the Waldwisse is also joined at Flastroff by the rau. de Halstroff (6.5km., four bridges); (2) the Dusbach, right bank, leaving the Bois de Bibiche (4.5km., 5 bridges).

The Ruisseau Canner

This small stream rises in Sarreguemines S.W., flows north and west and finally empties into the Moselle. Has swampy valley between Budange and Elzange. At Budange its width is 2.5m. to 3m. (8.2 to 9.3 feet), depth 1m. (3.3 feet). For continuation, see Metz N.E.

The Ruisseau Oudren

Of no importance. Rises east of Lemmershof, passes Oudren (2m. wide), Mettrich and Petite-Hettange (3m. wide) and enters the Moselle at Malling (Metz N.E.). Width 4m.; depth 1.3m.; length 9km. Eight bridges, of which the last two are in Metz Northeast. Bed is deeply cut, perpendicular banks, fringed with willows and reeds.

The Ruisseau Bist

This small stream crosses the southeast corner of quadrangle. Has low banks and wide swampy valley, flows into the Sarre.

The Ruisseau Prims

A stream of 64km. length which flows into the Sarre near Dilling. For section near confluence the current is slow, the stream winding through wide meadows. The bridges are listed under that heading.

The Moselle

Because of the very short distance covered by this stream in the quadrangle, no description will be included. For descriptions, see Commercy S.E. and N.E., and Sierck S.W. and N.W., also Metz S.E. and N.E.

RAILROADS

Line: Thionville to Volklingen via Teterchen and Hargarten

The section of line located in this quadrangle extends from Kedange to Brettnach, a distance of 30km. In addition, the line, after leaving the quadrangle, swings to the north, cutting the corner for about 3km. Double-track standard-gauge main line. For preceding section and a general description of the whole lines, see Metz N.E.

Important points on the line:

Overgrade crossing. Highway from Thionville to Saarlouis. Bridge No. 24.
End of cut.
Entrance into the Forest of Elingen.
Fill. Length, 600m.
Cut. Length, 400m.
Overgrade crossing. Road from Metzerbach to Budingen. Masonry bridge, one arch of 4m. opening. Bridge No. 25.
End of cut.
Fill. Length, 400m.
Cut. Length, 500m.
Cut. Length, 800m.
Overgrade crossing. Highway from Diedenhofen to Saarlouis. Bridge No. 26.
End of cut.
Exit from the Elzingen Forest.
Station at Kedingen. 20m. x 20m. receipt building to the left at the entrance to the station; telegraph office; freight shed, 10m. x 4m., to the left after passing the receipt building; 20m. x 7m. commercial platform; 25-ton scales; 6-ton crane; stone platform, 180m. x 18m.; two sidings to the left, 180m. and 400m. long, switched in the direction of Endorf and blind at the other end; military platform, 500m. x 7m., to the right, served by two double-entry sidings 490m. and 520m. long and joined to each other by a double switch; 106cu.m. water tank. Altitude, 195.7m.
Max. up grade between Kedingen and Endorf, 1.0 per cent.
Fill. Length, 700m.
Bridge over the two arms of the Kanner. Metal skew bridge; reinforced in 1913; length, 30m. Bridge No. 27.
Two cuts. Length, 150m. each.
Fill. Length, 100m.
Bridge over the Zulocher Graben. Masonry bridge, one arch. Bridge No. 28.
Undergrade crossing. Road from Hombourg to Ebrsweiler. Bridge No. 29.
End of fill.
Cut. Length, 200m.
Fill. Length, 200m.
Fill. Length, 200m.
Undergrade crossing. Local road. Bridge No. 30.
End of fill.
Cut. Length, 300m.
Overgrade crossing. Line Merzig Bettsdorf. Bridge No. 31.
Fill. Length, 600m.
Station at Endorf. Receipt building to the right; telegraph office; four main tracks, two of which are for the Merzig-Bettsdorf line, two to the left for the Diedenhofen-Volklingen line; freight shed to the left before coming to the receipt building; commercial platforms; 25-ton scales; 6-ton crane; two sidings to the right switched in the direction of Kedingen and blind at the other end; two double-entry sidings, 500m. and 530m. long, serve a military platform 500m. long; industrial siding to the right to gypsum quarries. Alt. 220.7m.
Max. up grade between Endorf and Ebersweiler, 1.1 per cent.
End of fill.
Cut. Length, 150m.
Overgrade crossing. Local road. Bridge No. 32.
End of cut.
Fill. Length, 150m.
Cut. Length, 100m.

Tunnel of Bidingen, 122m. long; two parallel elliptical arches, 0.62m. thick at the key, give passage to one way each; clearance 5.65m.; frontal walls 9.05m. high, 3.6m. thick at the base and 3m. average thickness, built in the earth to a depth of 1.5m. and with a stone railing 1.5m. high.

Cut. Length, 200m.; max. depth, 9.34m.

Fill. Length, 500m.; max. height, 22.7m.

Entrance into the Forest of Hunoldstein.

Viaduct over a brook; road into the Forest of Hunoldstein. Metal viaduct; five spans of 36m. separated by intervals of .6m.; braced girders 4m. high. Substructure, four masonry piers, each 15-20m. high, sunk 6.5m. into the ground; total length 190m. This viaduct is to be shortly reinforced (1913). Bridge No. 33.

End of fill.

Cut. Length, 400m.; max. depth, 5.54m.

Fill. Length, 500m.; max. height, 6.68m.

Undergrade crossing. Forest road. One span of 6m. opening with an aqueduct of 1m. Bridge No. 34.

Bridge over a brook. Masonry bridge; one arch of 3m. opening. Bridge No. 35. Semi-circular arch; clearance under the intrados 3m.; wing walls.

End of fill.

Cut. Length, 300m.; max. depth, 16.17m.

Overgrade crossing. Local road. Masonry bridge. Width of road 4m. Bridge No. 36.

Ebersweiler Tunnel. Length, 565 m.; two parallel passages, each affording passage for one track. The contruction is similar to the Bidingen Tunnel. (See above.)

Exit from the Hunoldstein Forest.

Cut. Length, 250m.; max. depth, 15.3m.

Fill. Length, 750m.; max. height, 7.21m.

Undergrade crossing. Road from Endorf to Ebersweiler. Width of road, 5m. Bridge No. 37.

Undergrade crossing. Local road. Bridge No. 38.

End of fill.

Two cuts. Length, 100m. each.

Fill. Length, 100m.

Station at Ebersweiler. Receipt building to the right; telegraph office; freight shed, 10m. x 4m., adjoining the other side of the receipt building; commercial platform, 20m. x 4m.; 25-ton scales; 6-ton crane; stone platform, 180m. x 18m.; one 300m. siding to the right serving the freight shed and the two platforms, blind at both ends and joined to the main tracks by two switches; 500m. military platform to the left, served by two sidings, 600m. long, double entry. Alt. 234m.

Max. down grade between Ebersweiler and Anzelingen, 1.1 per cent.

Entrance into the Ebersweiler Forest.

Fill. Length, 200m.; max. height, 6m.

Undergrade crossing. (Exit from the preceding station.) Road of approach to the military platform. Bridge No. 39.

End of fill.

Cut. Length, 200m.; max. depth, 5.9m.

Fill. Length, 350m.; max. height, 8m.

Bridge over the Hirkenbach Brook; masonry bridge; one arch of 2m. opening. Bridge No. 40.

End of fill.

Cut. Length, 200m.; max. depth, 3.6m.

Exit from the Ebersweiler Forest.

Cut. Length, 400m.; max. depth, 6.7m.

Overgrade crossing. Local road from Hessdorf to Ebersweiler. Bridge No. 41.

End of cut.

Fill. Length, 300m.; max. height, 5.9m.

Undergrade crossing. Road from Hessdorf to Neuschemrich. Bridge No. 42.

Culvert over a brook; masonry. Bridge No. 43.

End of fill.
Cut. Length, 200m.; max. depth, 6.5m.
Fill. Length, 200m.; max. height, 5.3m.
Cut. Length, 100m.
Branch to the right. Two-track extension, direction of Pieblingen, to the Metz Dilling line.
Cut. Length, 100m.; max. depth, 1.2m.
Fill. Length, 150m.; max. height, 3m.
Culvert over a brook. Bridge No. 44.
End of fill.
Cut. Length, 150m.; max. depth, 1.6m.
Fill. Length, 1.5km.; max. height, 4.6m.
Undergrade crossing. Local road. Bridge No. 45.
Culvert over a brook. Masonry bridge; one arch of 4m. opening. Bridge No. 46.
Branch to the right. Double tracked Metz-Dilling line.
End of fill.
Bridge over the Pieblingen Bach. Bridge No. 47.
Station at Anzeling. Receipt building to the right; telegraph office; three main tracks, one to the right for the Metz-Dilling line, one in the middle for the Diedenhofen-Volklingen line, and one to the left used in common by the two lines. Freight station to the right after passing the receipt building; 6-ton crane; one siding to the right, blind at both ends and linked to the main tracks by two switches; one 200m. siding to the left, switched in the direction of Freisdorf and blind at the other end. Station was rebuilt in 1907, at the time of the construction of the Metz-Dilling line, and its sidings were enlarged. Alt., 207.3m.
Max. down grade between Anzeling and Freisdorf, 0.5 per cent.
The two tracks are common from the preceding station as far as the Busendorf station to the Diedenhofen-Volklingen and the Metz-Anzeling lines.
Undergrade crossing. (At the exit of the preceding station.) Foot road. Bridge No. 48.
Undergrade crossing. Local road. Bridge No. 49.
Bridge over the Anzeling Bach. Masonry bridge; one arch of 8m. opening; three mine chambers in each abutment. Bridge reconstructed in 1911. Bridge No. 50.
Undergrade crossing. Road from Anzeling to Hollingen. Bridge No. 51.
End of fill.
Cut. Length, 300 m.; max. depth, 9.5m.
Cut. Length, 150m.
Fill. Length, 1km.; max. height, 2m.
Station at Freisdorf. Receipt building to the left; telegraph office; freight shed, 10m. x 4m., to the left before coming to and adjoining the receipt building; 20m. x 4m. commercial platform; 180m. x 18m. stone platform; 25-ton scales; 6-ton crane; one 180m. siding serving the freight shed and the two platforms, blind at both ends and joined to the main tracks by two switches; military platform, 500m. x 7m., to the right served by two 500m. double entry sidings. Alt. 198.4m.
Max. up grade between Freisdorf and Busendorf, 0.5 per cent.
End of fill.
Cut. Length, 300m.
Fill. Length, 400m.; max. height, 1.7m.
Fill. Length, 2.1km.; max. height, 7.6m.
Undergrade crossing. Foot road. Bridge No. 52.
Flood bridge over the Nied meadows. Metal bridge; four spans, each of 11.7m.; latticed bowstring girders; masonry piers and abutments. The bridge was rebuilt in 1911. Bridge No. 53.
Bridge over the Nied. Metal bridge; one span of 11m.; latticed bowstring girders; masonry abutments. Reconstructed in 1911. Bridge No. 54.
Station at Busendorf. 25m. x 25m. receipt building to the left at the exit from the station; telegraph office; four main tracks, two to the right for the Diedenhofen-Volklingen line, two to the left for the Metz-Dilling line; 25m. x

6m. freight shed to the left before coming to the receipt building; two commercial platforms, of which one adjoins the freight shed and the other parallels the Dilling line at the exit from the station; 25-ton scales; 6-ton crane; stone platform, 110m. x 10m.; two sidings to the left, one of which is 100m. long and the other 160m., blind at both ends and joined to the main tracks by a switch; one double-entry 560m. siding to the right; 500m. military platform to the right with approach road from the Busendorf-Wallerchen highway, served by two double-entry sidings 540m. and 570m. long; industrial siding to a foundry; locomotive shed for one locomotive to the right at the entrance to the station, with a turntable 16m. in diameter; two 106 cu.m. water tanks fed by a steam pump located near the bridge over the Nied; 500-ton coal depot to the left. Alt. 207.9m.

Max. up grade between Busendorf and Brettnach, 1 per cent.

Undergrade crossing. (Exit from the preceding station.) Road from Busendorf to Wallerchen. Metal bridge; one span of 6m.; five tracks pass over this bridge. Bridge No. 55.

End of fill.

The line Metz-Dilling strikes off to the right and passes under the line Diedenhofen-Volklingen at the following undergrade crossing.

Cut. Length, 400m.; max. depth, 12.1m.

Overgrade crossing. Road from Busendorf to Brettnach. Masonry bridge; one arch of 16m. opening; length of bridge, 16m. Bridge No. 56.

End of cut.

Fill. Length, 200m.; max. height, 11m.

Undergrade crossing. Line Metz-Dilling. Metal bridge; one span; straight girders; metal railing; masonry abutments. Bridge No. 57.

End of fill.

Cut. Length, 200m.; max. depth, 4.7m.

Fill. Length, 200m.; max. height, 5.5m.

Culvert over a brook; masonry. Bridge No. 58.

End of fill.

Cut. Length, 400m.; max. depth, 7m.

Fill. Length, 500m.; max. height, 9.7m.

Undergrade crossing. Road from Wallerchen to Rothendorf. Bridge No. 59.

Bridge over the Ohlig Bach. Masonry bridge; one arch of 4m. opening. Bridge No. 60.

Undergrade crossing. Local forest road. Bridge No. 61.

End of fill.

Cut. Length, 500m.; max. depth, 7.5m.

Fill. Length, 400m.; max. height, 9.2m.

Undergrade crossing. Local road and a brook. Bridge No. 62.

End of fill.

Cut. Length, 400m.; max. depth, 7.5m.

Fill. Length, 1km.; max. height, 7.5m.

Undergrade crossing. Road from Brettnach to Welwingen. Bridge No. 63.

End of fill.

Station at Brettnach. Receipt building to the right; telegraph office; freight shed to the left after passing the receipt building; 15m. commercial platform; one 260m. siding to the left, blind at both ends and linked to the main tracks by two switches. Alt. 256.3m.

Max. up grade between Brettnach and Teterchen 1.1 per cent.

Cut. Length, 600m.; max. depth 13.9m.

Overgrade crossing. Road from Brettnach to Weleingen. Bridge No. 64.

End of cut.

Fill. Length, 250m.; max. depth 3.2m.

Culvert over a brook. Masonry bridge. Bridge No. 65.

Line enters the quadrangle Sarreguemines S. W.

Line reenters Sarreguemines N. W.

Station at Ueberherrn. Receipt building to the left; telegraph office; freight shed to the left after passing the receipt building; 25m. commercial platform to the left after passing the freight shed; 25-ton scales; two sidings to the left

serve the freight shed and the platform; one of these sidings is switched in the direction of Linslerhof and blind at the other end, the other is switched in the direction of Hargarten and is also blind at the other end; one siding to the right to a tile works, switched upon the preceding sidings; military platform to the right, 500m. long, served by two double-entry sidings; entrance to the platform is given from the Ueberherrn-Differten highway. Alt. 204.3m.

Max. down grade between Ueberherrn and Linslerhof: 0.4 per cent.

Fill. Length, 1.1km.

Culvert over an irrigation ditch. Bridge No. 65a.

End of fill.

Cut. Lenght, 800m.

Station at Linslerhof. Receipt building to the left; telegraph office; small freight shed to the left after passing the receipt building; 40m. commercial platform to the left; one siding to the left switched in the direction of Ueberherrn and blind at the other end; one double entry siding to the right; 400m. extension to the left to the Linslerhof Farm. Alt. 198.4m.

Max. up grade between Linslerhof and Differten: 0.2 per cent.

Fill. Length, 600m.

Line enters quadrangle Sarreguemines N. E.

Line: Metz to Dillingen

The section of the line located in the quadrangle extends from Piblange to Dilling, a distance of 31.5km., of which the 7.36km. between Anzeville and Bouzonville are used in common with the Thionville-Volklingen line. Double-track standard-gauge main line. For preceding sections and general description of whole line, see Metz S. E. and Sarreguemines S. W.

Important points on the line:

Station at Pieblingen. Receipt building to the right; telegraph office; freight shed to the right before coming to the receipt building; 15m. commercial platform; 25-ton scales; 6-ton crane; one 120m. siding on the left, blind at both ends and joined to the main tracks by two switches; platform 120m. x 12m; military platform, 500m. long to the left, served by two 550m. double entry sidings; switch tower (Saxby) to the left at the entrance to the station. Alt. 225.2m.

Max. up grade between Pieblingen and Anzelingen: 0.5 per cent.

Undergrade crossing. Road from Hessdorf to Mengen. Bridge No. 66.

Undergrade crossing. Road for pedestrians. Bridge No. 67.

End of Fill.

Cut. Length, 700m.

Overgrade crosing. Road from Hessdorf to Gelmingen. Bridge No. 68.

End of cut.

Fill. Length, 150m.

Bridge over a brook and a foot road. Bridge No. 69.

End of fill.

Cut. Length, 600m.

Fill. Length, 300m.

Branch to the left. Double track extension to the Diedenhofen-Volklingen line.

Bridge over a brook and a foot road from Hessdorf to Anzelingen. The bridge gives passage to the four tracks of the Metz-Dilling line and the above-mentioned extension.

End of fill.

Cut. Length, 300m.

Fill. Length, 1.5km.

Branch to the left. Double-track line from Diedenhofen to Volklingen.

Bridge over the Pieblinger Bach. Bridge No. 71.

Station at Anzelingen. Alt. 207.3m.

Section from Anzeling to Busendorf.

Over this section, the lines are common to the Metz-Dilling and the Diedenhofen-Volklingen lines. Length of section 7.36km.

(See the Diedenhofen-Volklingen line for a description of the section and the stations at Anzeling, Freisdorf and Busendorf.)

Section from Busendorf to Dilling.

Rails of XI profile on wooden ties; length of the section, 20.33km., of which 1.988km. is level, 18.344km. grade, 11.892km. straight and 8.44km. curve; max. grades between stations vary from 0.75 per cent to 0.5 per cent with the max. at a point between the Sarre blockstation and Dilling. Many curves, generally of a small radius; min. radius of 981 feet, 5 deg. 50 min., is reached at several points. Many and important fills and cuts. Constructions to notice: Three tunnels, one viaduct over the Ihnerbach and one bridge over the Sarre. Locomotive sheds at Busendorf and Dilling. Water tanks at Busendorf and Dilling. The section is equipped with bell signals and telephone over its entire extent.

The section, which covers 12.810km. in Rhenish Prussia and 7.52km. in Lorraine, is operated by the "Direction des Chemins de Fer de Saarbrucken". It was opened to operation the 1st of July, 1901.

Important points on the line:

Station at Busendorf. Alt. 207.2m.

Max. up grade between Busendorf and Filsdorf: 0.5 per cent.

Undergrade crossing. (Exit from the preceding station.) Road from Busendorf to Wallerchen. Metal bridge; one span of 6m; five tracks pass over this bridge. Bridge No. 79.

The line Diedenhofen-Volklingen strikes off at this point.

Cut. Length, 300m.

Tunnel. Length, 315m. The Busendorf-Teterchen highway passes over this tunnel.

Cut. Length, 50m.

Overgrade crossing. Line Diedenhofen-Volklingen. Metal bridge; one span; straight iron girders; metal railing; masonry abutments. Bridge No. 80.

End of cut.

Bridge over the Ohligs Bach. Bridge No. 81.

Tunnel. Length 210m.

Cut. Length, 150m.

Fill. Length, 1.1km.; max. height, 13m.

Undergrade crossing. Busendorf-Saarlouis highway. Metal bridge; one span of 8m.; two straight girders; metal railing; masonry abutments; wing walls. Bridge No. 82.

Culvert over an affluent of the Nied. Bridge No. 83.

Undergrade crossing. Busendorf-Niedaltdorf highway. Masonry bridge; one arch; semi-circular vault of 6m. opening under a raised fill; wing walls. Bridge No. 84.

Undergrade crossing. Road Heckling to Aideling. Bridge No. 85.

End of fill.

Cut. Length, 400m.

Cut. Length, 1km.

Filsdorf Way Station. Stop for exclusive passenger, baggage and express service. Receipt building to the right; small freight shed to the right adjoining the receipt building on this side; commercial platform; platform, 100m. x 10m.; one 250m. siding to the right, serves the freight shed and the two platforms, blind at both ends and joined to the main tracks by two switches. Alt. 219.6m.

Max. down grade between Filsdorf and Gerstlingen: 0.5 per cent.

Overgrade crossing. Road from Filsdorf to the Busendorf-Niedaltdorf highway. Concrete bridge; three arches of 8m. opening; semi-circular vaults 9m. high under the intrados; transversal relieving arches; piers 1m. thick; length of the bridge, 35m. Bridge No. 86.

End of cut.

Fill. Length, 200m.

Culvert over a brook. Bridge No. 87.

End of fill.

Cut. Length, 450m.

Fill. Length, 2.3km.

Undergrade crossing. Local road from Filsdorf to the Busendorf-Niedaltdorf highway. Metal bridge. Bridge No. 88.

Undergrade crossing. Local road from Gerstlingen to the Nied. Bridge No. 89.

Undergrade crossing. Road from Gerstlingen to Niederwellingen. Masonry bridge; one arch; semi-circular vault, 6m. opening, under a raised fill; wing walls. Bridge No. 90.
Undergrade crossing. Foot road. Bridge No. 91.
End of fill.
Cut. Length, 500m. To the right.
Station at Gerstlingen. Receipt building to the left at the end of the station; telegraph office; freight shed to the left before coming to the receipt building; commercial platform; 30-ton scales; 6-ton crane; stone platform 180m. x 16m; siding to the left, serving the freight shed and the two platforms, blind at both ends and joined to the main tracks by two switches; military platform, 500m. long, served by two 600m. double entry sidings. Alt. 204.6m.
Max. down grade between Gerstlingen and Kerprichhemmersdorf: 0.5 per cent.
Frontier of the Rhine Province.
Cut to the right. Fill to the left. Length, 700m.
The line is paralleled, to the left, by the Busendorf Niedaltdorf highway and to the right by the Nied for a distance of about 400m.
Viaduct. (Niedaltdorf.) Over the valley of the Innerbach and the roads from Niedaltdorf to Ihn and Buhren. Metal viaduct; four spans, two of which are lateral of 23m. opening and two central of 27m. opening; straight girders; clearance, max. 7m.; piers and abutments of masonry; metal railings. The two arms of the river pass under the central spans and the roads under the lateral spans. Bridge No. 92.
Cut. Length, 300m.
Undergrade crossing. Road from Niedaltdorf to Kerprichhemmersdorf. Bridge No. 93.
Cut. Length 150m.
Tunnel. Length 180m. Local road from Niedaltdorf to the Nied passes over this tunnel.
Cut. Length, 200m.
Cut. Length, 400m.; to the right.
Fill. Length, 750m.
Undergrade crossing. Road from Niedaltdorf to Kerprichhemmersdorf. Bridge No. 94.
Industrial branch to the lime kilns on the right; length, 200m.
End of fill.
Cut. Length, 400m.
Overgrade crossing. Road from the station at Kerprichhemmersdorf to Gros Hemmersdorf. Reinforced concrete bridge; one arch of 10m. opening; metal railings. Length of bridge, 24m. Bridge No. 95.
End of cut.
Fill. Length, 2.2km.
Station at Kerprichhemmersdorf. Receipt building to the left; telegraph office; freight station to the left after passing the receipt building; stone platform, 180m. long; one siding to the left serving the freight station and the two platforms, blind at both ends and joined to the main tracks by two switches; military platform, 500m. long, to the right, served by two double-entry 550m. sidings. Alt. 191.2m.
Max. up grade between Kerprichhemmersdorf and Baren Itsbach, 0.5 per cent.
Culvert over a brook. (Exit from the preceding station.) Bridge No. 96.
Undergrade crossing. (Exit from the above station.) Road from Kerprichhemmersdorf to Guisingen. Bridge No. 97.
End of fill.
Cut. Length, 300m.
Cut on the right. Fill on the left; length, 400m.
Industrial branch on the right; to quarries; one track, length 500m.
Bridge over the Birken-Bach brook. Bridge No. 98.
Cut to the right. Fill to the left. Length, 800m.
The line is paralleled on the left for a distance of about 400m. by the Nied.
Fill. Length, 200m.

Culvert over a brook. Bridge No. 99.
End of fill.
Station at Buren Itzbach. Receipt building to the left; telegraph office; freight shed to the left before coming to the receipt building; commercial platform; 30-ton scales; 6-ton crane; siding to the left, blind at both ends and joined to the main tracks by two switches; extension to the right to a tile works. Alt. 194.4m.
Max. down grade between Buren Itzbach and the block station on the Sarre, 0.5 per cent.
Cut. Length, 700m.
Overgrade crossing. Road from Itzbach to Rehlingen. Bridge No. 100.
End of cut.
Fill. Length, 1.4km.
Bridge over the Muhlbach. Bridge No. 101.
Undergrade crossing. Road from Saarlouis to Trier. Metal bridge. Bridge No. 102.
Undergrade crossing. Local road. Bridge No. 103.
Bridge over the Sarre.

1. Part over the river. Metal bridge; 3-span, the central one of which is 50m. and the two lateral ones 38m. each; straight latticed American girders with vertical struts and diagonal ties; wind bracing; metal railing; masonry piers; height above the average water level, 6.56m. Bridge No. 104.
2. Part over the right bank. Masonry bridge; four arches; vaults of elliptical arc of 17m. opening; metal railings; a block house at each end of the bridge; two local roads pass under this bridge, one on the left bank under the first span and the second on the right bank under the fourth arch. Bridge No. 105.

Fill. Length, 1.1km.
Branch to the left. Freight and military siding, two tracks, direction of Karthaus, to the line Saarbrucken-Karthaus.
Bridge over an irrigation ditch. Bridge No. 106.
Undergrade crossing. Local road from Pachten to the Sarre meadows; masonry bridge. Bridge No. 107.
Undergrade crossing. Bridge over a brook and a local road; masonry bridge. Bridge No. 108.
Undergrade crossing. Line Saarbrucken-Karthaus. Metal bridge. Bridge No. 109.
End of fill.
Bridge over the Pachtener Bach. Masonry bridge. Bridge No. 110.
Cut. Length, 200m.
Overgrade crossing. Road from Pachten to the Saarlouis Trier highway (right bank). Bridge No. 111.
End of cut.
The line is rejoined on the right by the line Saarbrucken-Karthaus; four main tracks on the same roadbed from this point as far as the station at Dilling.
Overgrade crossing. Road from Pachten to Dilling. Metal bridge. Bridge No. 112.
Station at Dilling. Alt. 182.4m.

Line: Saarbrucken to Karthaus

The section of the line located in this quadrangle extends from Dilling to Meckring, a distance of 13km. Double track standard gauge main line. For preceding section and general description of whole line, see Sarreguemines N.E.

Important points on the line:

Fill. Length, 200m.
Two Cuts. Length 200m. and 400m.
Fill. Length, 700m.
Bridge over the Prims. Masonry bridge; nine arches, each of 9.4m. opening. Bridge No. 113.
The line is rejoined on the right by the single track Dilling-Primsweiler line. Three main tracks on the same roadbed from this point to Dilling.

Undergrade crossing. Road from Dilling to the old paper works. Masonry bridge. Bridge No. 114.

Bridge over the canal of the Prims to the Dilling factories. Masonry bridge; two arches, each of 5.55m. opening. Bridge No. 115.

Overgrade crossing. (Entrance to the following station.) Road from Dilling to the Sarre. Metal bridge; one span of 15m.; straight latticed girders. Bridge No. 116.

End of fill.

Station at Dilling. Receipt building (large) to the right; telegraph office; underground passage affording access to the passenger platform; five main tracks, two to the left for the line Saarbrucken-Karthaus, two in the middle for the line Metz-Dilling, and one to the right for the line Dilling-Primsweiler; four switches between the main tracks; freight shed to the left; 32m. commercial platform; 30-ton scales; 5- and 1.25-ton cranes; two 570m. and 670m. double-entry sidings to the right. System of ten sidings, each about 800m. long, and double-entry to the left; 500m. military siding to the left at the exit from the station, served by two double-entry sidings; locomotive shed with a 16m. diameter turntable; 1000cu.m. water tank; rail depository; industrial sidings, one to the right, to the Dilling metallurgical plants (Dillinger Huttenwerke Akt. Ges.) (about 3km. long); two to the left, to the Iron Plate Foundry of Meguin & Co. Alt. 181.9m.

Max. down grade between Dilling and Beckingen, 0.32 per cent. Minimum radius of curve, 3679 feet or 1 deg. 35 min.

The line is paralleled on the right, for a distance of about 900m. by the double track line from Metz to Dilling; four main tracks on the same roadbed.

Overgrade crossing. Road from Dilling to Pachten. Metal bridge; one span of 20m.; straight latticed girders. Bridge No. 117.

The line Metz-Dilling strikes off to the right.

Cut. Length, 400m.

Overgrade crossing. Road from Pachten to the Saarlouis Trier highway. Bridge No. 118.

End of cut.

Bridge over the rau. Pachten. Masonry bridge; one arch of 3.76m. opening. Bridge No. 119.

Cut. Length, 300m.; to the right.

Overgrade crossing. Line Metz-Dilling. Metal skew bridge. Bridge No. 120.

Culvert over a brook. Masonry bridge; one arch of 1.9m. opening. Bridge No. 121.

Fill. Approximate length, 3km.; max. height, 7m., masonry bank 113m. long at the entrance of the following station.

Culvert over an irrigation ditch in the meadows of the Sarre. Bridge No. 122.

Block station at Pachten. Branch to the left; freight and military two-track extension to the Metz-Dillingen line; length, about 1.2km. This extension passes over two local roads from Pachten to the Sarre meadows.

Two culverts over irrigation ditches in the Sarre meadows. Bridges No. 123 and No. 124.

Undergrade crossing. Meadow road. Masonry bridge. Bridge No. 125.

Bridge over the Condeler Bach. Masonry bridge. Bridge No. 126.

Undergrade crossing. Road from Beckinger to Rehlingen. Masonry bridge. Bridge No. 127.

Bridge over the Beckinger Bach. Masonry bridge; one arch of 5.55m. opening. Bridge No. 128.

Station at Beckinger. Receipt building to the left; telegraph office; freight shed to the right; 20m. commercial platfrom; 30-ton scales; 5-ton crane; two double-entry sidings, 670m. and 405m. long; coal platform; two extensions to the right, one to the Karcher & Co. (iron tools and screws); two to the Gorg depot of building material. Alt. 180.1m.

Max. up grade between Beckingen and Fremersdorf, 0.26 per cent; min. radius of curves between same stations, 753m. (2462 ft., 2 deg., 20 min.).

Fill. Length, 2.3km.

Fill to the left. Cut to the right, 1.3km. long.

Flood bridge. Bridge No. 129.
End of fill and cut.
Bridge over the Ohligsbach and the road from Fremersdorf to Menningen. Bridge No. 130.
Cut to right. Fill to the left; 600m. long.
Way station at Fremersdorf. Exclusive passenger, baggage and express station; receipt building to the left; telegraph office. Alt. 181.2m.
Max. down grade between Fremersdorf and Merzig, 0.4 per cent. Min. radius of curve between the same stations, 3630 ft. or 1 deg. 35 min.
End of fill and cut.
Fill. Length, 200m.; max. height, 6m.; masonry bank for 20m.
Undergrade crossing. Road from Bietzen to the Saarlouis Trier highway. Masonry bridge; one arch. Bridge No. 131.
End of fill.
Fill. Length, 400m.
Culvert over the Harlinger Bach. Bridge No. 132.
Undergrade crossing. Road from Harlingen to the Sarrlouis Trier highway. Masonry bridge; one arch. Bridge No. 133.
End of fill.
Cut. Length, 500m.
Overgrade crossing. Line Merzig-Bettsdorf. Bridge No. 134.
End of cut.
Cut. Length, 300m.
Overgrade crossing. Saarlouis Trier highway. Masonry bridge. Bridge No. 135.

For continuation of line, see Sierck S.W.

LINE: DILLING TO PRIMSWEILER

Secondary one-track line. Standard gauge. Length of the line 13.45km., of which 6.381km. is level, 7.069 grade, 8.514km. straight and 4.936km. curve. Max. grade between stations, 0.5 per cent for the entire extent of the line. Many curves, and, in general, of small radius; the min., 981 ft., 5 deg. 50 min., is encountered at several points on the line. Many cuts and fills. Constructions to notice, two bridges over the Prims and its canalized derivation and one bridge over the Theel. Sheds for locomotives and water tanks at Dilling and Primsweiler. The line is equipped with telephone over its entire extent. Operated by the "Direction de Saarbrucken."

Important points on the line:

Station at Dilling. (See the Saarbrucken-Karthaus line for a description of this station.) Alt. 181.9m.
Max. up grade between Dilling and Nalbach, 0.5 per cent. Min. radius of curves between the same stations, 981 ft. or 5 deg. 50 min.
The line is paralleled on the right for a distance of about 800 m. by the double-tracked Saarbrucken-Karthaus line; three tracks on the same roadbed.
Fill. Length, 900m.
Overgrade crossing. (Exit from the preceding station.) Road from Dilling to the Saare. Metal bridge; one span of 15m.; straight latticed girders. Bridge No. 136.
Bridge over the canal derived from the Saare and serving the factories at Dilling. Masonry bridge for the passage of the three main tracks mentioned above; two arches of 5.55m. opening each. Bridge No. 137.
Undergrade crossing. Road from Dilling to the old paper works. Masonry bridge; one arch. Bridge No. 138.
The line Saarbrucken-Karthaus strikes off to the right.
Bridge over the Prims. Metal bridge; four spans; piers and abutments masonry. Length about 40m. Bridge No. 139.

For continuation of line, see Sarreguemines N.E.

LINE: THIONVILLE TO KARTHAUS

The section of the line located in this quadrangle crosses the northwest corner and has a length of about 3km. Double-track standard-gauge main line.

For preceding section and general description of line, see Metz N. E.

Important points on the line:

Culvert over the Krahengraben. Metal bridge; one span of 2.7m. Bridge No. 140.

Cut to the right. Fill to the left, 2km. long. The line is skirted on the left by a bend of the Moselle.

Culvert over a brook. Metal bridge; one span of 2.2m. Bridge No. 141.

End of cut and fill.

Fill. Length, 900m.

For continuation of line, see Sierck S.W.

Line: Bettsdorf to Merzig

Standard gauge, secondary line. This line leaves the station at Bettsdorf, where it has its terminus in the tracks of the Metz Dilling line. It then penetrates the valley of the Kanner which it follows from N. to S., as far as the station at Ensdorf, at which point it meets the Diedenhofen-Volklingen line. It parrallels the Diedenhofen-Volkingen line for a distance of about 1.5km., turns toward the east, crosses the D.-V. line, passes through the Hunoldstein Forest in a tunnel and, after passing Dalstein, reaches the valley of the Ihrsbach, from there to Monneren. Here it bends anew toward the east and reaches the valley of the Hargartenerbach or Bruchbach, near Laumesfled, and follows it to the outskirts of Walweisdorf. It next takes a northerly direction, crosses the Sierck Forest; at its exit from this forest it meets successively the valley of the Hermesbach, the Muhlenbach at Waldweise, and the Reinbach or Durrmuhlenbach at Silwingen, crossing the line of hills which separate the latter two valleys via a tunnel. Following from west to east the valley of the Reinbach from Silwingen to Mondorf, it leaves this valley and reaches, through a very deep cut, Mechern, where it strikes the valley of the Sarre, which it crosses on a large metal bridge. It then takes a northerly direction towards Merzig, its terminal point.

The Bettsdorf-Merzig line was projected in 1907. The first construction work commenced in 1912. By the month of January, 1914, the construction of the line had been pushed forward to include the following: The sections between Bettsdorf and Halsdorf, and Halsdorf and Mondorf very well advanced; the overgrade crossing, aqueducts, etc., had been finished; at Bettsdorf, the extension tracks to the Metz-Dilling line had been laid; the two tunnels, Dalstein (900m.) and Waldweise (1,750m.) were on the verge of completion, as well as the bridge over the Sarre; the station at Merzig had not yet been changed. The line was to comprise the following stations: Endorf (new station intended to replace the old one and to be named Homburg Budingen), Dalstein, Monneren, Laumesfeld, Halsdorf-Bisengen, Biringen-Waldwiese, Silwingen, Mondorf, Mechern and Merzig. The majority of the constructions are metal, (undergrade and overgrade crossings).

Bridge over the Sarre. Curved metal bridge; eight spans, three of which are flood spans of 30m. each on the left bank; one span of 50m. and four spans of 25m. each on the right bank; two abutments and seven masonry piers. The first five piers (coming from Bettsdorf) are 12m. long and 3m. thick, the last two are 7m. long and 3m. thick. The central pier (the only pier in the river) is provided with mine chambers. Total length of bridge, 246m. Bridge No. 142.

New German Lines

See the accompanying map of the quadrangle for lines built by the Germans, and also see the addenda for changes due to information received later than the date of this map.

ROADS

The roads and highways of this section are divided into five classes and are shown on the accompanying map as follows:

(1) *National Roads* (Routes Nationales or R.N.).—Indicated by a double red line and marked R.N. No. 3 for example. The width of the road between ditches is from 10m. to 12m. (33 to 40 feet). The width of the paved portion is from 5m. to 6m. (16 to 20 feet), but is generally five meters.

(2) *Department Roads* (Routes Departmentales or Rtes. Deples.).—Indicated by a single heavy red line and marked D. No. 10 or G.C.D. No. 10 for example. The width of the road varies from 8m. to 11m. (26 to 36 feet) between ditches but is generally 10m. (33 feet). The width of the pavement varies from 4m. to 6m. (13 to 20 feet).

(3) *Roads of Important Communications* (Chemins de Grande Communication, Chins. de Gde. Com.).—Indicated by a single heavy red line and marked G.C. No. 10 for example. Width between ditches, 8m. (26 feet); width of paving, 4m. to 5m. (13 to 16 feet). For the purpose of this information and the accompanying maps, no distinction has been made between No. 2 and No. 3, the only difference seeming to be the width of the paving. Numbers of these roads are the same as the Departmental roads from which they are made. Thus, Dept. Road No. 1 (Rte. Deple. No. 1) comes from Chin. de Gde. Com. No. 1 bis.

(4) *Country Roads* (Chemins de 'Interet Commun.), and *Local Roads* (Chemins Vicinaux).—Width between ditches 6m. (20 feet), width of paving 3m. to 4m. (10 to 13 feet). Indicated by a single light red line. On the French maps by two full lines close together.

(5) *Ordinary Roads.*—No account of such is given herein. They consist of farm and forest roads and are indicated on the French 1:50,000 map with single lines or double lines, one of which is dotted.

Lorraine and Rhine Prussia

Detailed information regarding the roads in Lorraine or Rhine Prussia is not available. The details of the size and importance of roads, as shown on the map, are taken from the Carte Michelin, an automobile map on a scale of 1:200,000. This set of maps is a continuation of the same map in France, and in general it can be assumed that roads of similar designation are similar in character to those in France.

Data on road bridges is also lacking, except when they occur over an important stream, canal or railroad. Bridges on roads where shown on map are so designated as to position on German maps, but no data otherwise is available.

Certain roads, because of their locations between important towns, have been assumed to be of the R.N. type, while others are taken as of less importance.

TOWNS AND VILLAGES

The following list comprises all the towns and villages in the quadrangle, the location upon a road or roads, the stream, if any, upon which the town is situated, the population and the number of houses. There are also included the coordinates of the place based upon the French system where possible. The zero of this system lies southwest of France and the coordinates are all plus to the east and north. In this table the easting is given first and the northing is given second

Name of Town or Village	Road	Stream	Coord. E.	Coord. N.	Pop.	Houses
Alboncourt		Canner	399	275	306	82
Anzeling		Anzeling	408	275	315	78
Beaumarais		Sarre	426	280	949	183
Becking		Sarre	424	289	1467	247
Bedersdorf			421	279	238	50
Berg		Moselle	387	293	198	41
Berus			425	275	1063	189
Berveiller			421	275	384	94
Bibiche			409	282	427	91
Biren			422	285	582	113
Biring			414	291	260	53
Bisten			425	274	334	63
Bitzing			422	291	484	98
Bourg Dauphin			427	276	507	109
Bouzonville	R.N.	Nied	413	278	1699	349
Brettnach			414	274	388	97
Buding		Canner	397	283	382	94
Budling			400	284	229	51
Chateau Rouge			417	276	172	40
Chemery	R.N.	Anzeling	407	279	421	107
Dalstein	R.N.		404	280	428	108
Dilling	R.N.	Sarre	427	284	4175	560
Drogny			404	273	62	15
Ebersweiller			403	276	706	178
Emerstroff			421	287	318	62
Evendorff			405	291	268	70
Fequin	R.N.	Sarre	423	289	306	55
Filsberg	R.N.		425	278	694	126
Filstroff		Nied	413	281	686	167
Flastroff			413	286	477	103
Forsweiler			425	276	737	139
Freistroff		Nied	409	277	935	210
Fremstroff	R.N.	Sarre	421	290	626	109
Fuhrweiler			417	287	347	64
Gerstlingen			421	282	432	88
Gros Hemmersdorf		Nied	419	285	430	102
Guerlefang			419	279	570	102
Guerstling			416	282	307	68
Halstroff			409	288	297	76
Harling			421	292	292	54
Haustat			427	291	501	127
Haute Sierck			403	289	251	51
Heckling		Nied	413	279	172	40
Heining			417	280	269	54
Helling			400	283	155	38
Hestroff			405	275	431	118
Hirdspach			423	284	380	66

Name of Town or Village	Road	Stream	Coord. E.	Coord. N.	Pop.	Houses
Holling	.....	Nied	410	274	261	71
Hombourg sur Canner....	.....	Canner	399	278	342	66
Hunting	.....	.....	398	292	269	64
Ihn on Loignon	.....	.....	418	281	455	92
Ittersdorf	R.N.	.....	422	278	653	128
Kalembourg	.....	.....	405	286	145	32
Kedange	.....	Canner	399	280	413	95
Kemplich	.....	.....	402	282	452	112
Kerlingen	.....	.....	422	280	354	69
Kerling les Sierck	.....	.....	400	290	596	128
Kerprich Hemmersdorf ...	.....	Nied	418	284	589	128
Kirchnaumen	.....	.....	406	289	750	168
Klang	.....	.....	401	281	168	58
Laumesfeld	.....	.....	406	286	451	95
Lemstroff	.....	.....	400	286	194	64
Leyding	.....	.....	418	279	195	38
Limberg	.....	.....	423	283	125	19
Luttange	R.N.	.....	396	276	385	113
Meckring	R.N.	Sarre	420	291	671	119
Menskirch	.....	Anzeling ..	405	281	219	60
Merten	.....	Bist	422	273	706	154
Metzeresche	.....	.....	396	279	477	116
Mondorf	.....	.....	417	291	442	81
Monneren	.....	Anzeling ..	404	284	511	115
Montenach	.....	.....	402	292	457	108
Neunkirchen	.....	Gogelfang .	415	285	248	63
Nied Altdorff	.....	Nied	417	283	514	120
Oberdorff	.....	.....	417	276	207	60
Ober Esch	.....	.....	415	289	280	60
Obenhoven	.....	.....	417	275	79	23
Oudren	.....	Ouden	398	288	677	164
Patten	R.N.	Sarre	425	284	1500	269
Piblange	.....	Piblange ..	404	274	322	80
Piquart	R.N.	.....	427	278	391	70
Relling	.....	Sarre	424	287	1454	254
Remelfang	.....	.....	411	275	162	38
Remeling	.....	.....	410	290	378	83
Remering	.....	.....	419	275	459	113
Schiftrof	.....	Nied	423	286	353	64
Schwerdorff	.....	.....	416	286	489	100
Silving	.....	.....	416	292	234	45
St. Francois	.....	.....	406	284	201	43
Ste. Barbe	.....	.....	424	281	381	79
Ste. Marguerite	.....	.....	403	286	140	35
Tromborn	R.N.	.....	417	274	366	86
Uberherrn	.....	Bist	425	273	879	174
Vaudreching	.....	.....	412	277	341	84
Veckring	.....	.....	401	283	354	55
Villing	.....	.....	420	276	300	63
Waldevrange	G.C.D.	Sarre	426	281	2863	403
Waldweistroff	.....	.....	410	285	452	113
Waldwisse	.....	Gogelfang .	413	291	776	177
Wolfling	.....	.....	417	278	155	36

SARREGUEMINES NORTH-WEST

DATA ON BRIDGES

In the following list of bridges, the enumeration has been based upon the idea of designating a bridge in three ways, as follows; (a) as being over an important stream, road, or railroad; (b) as being on a railroad; (c) as being on a highway or road. In this list the bridges on important streams are given first, then follow those upon railroads, and finally those upon roads are given in the order of their importance. This results in a bridge being noted twice, and sometimes three times. Where such duplication of record occurs, reference is made to the preceeding item number for the same bridge. Bridges are designated in the list by item numbers. All dimensions are given in meters.

ITEM	INDEX No. ON MAP	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
1		Down the Valley of Saare	Railroad Metz to Dilling	Relling	Saare and flood channel	1-50.0 2-38.0 4-8.0	180.0			Same as # 104 and 105 Metal and Masonry
2		"	Road Becking to Relling	"	Saare	1-5.6+ 2-15.8+	86.0			Metal
3		"	Railroad Bettsdorf to Mertzig	Meckring	Saare and flood channel	1-50.0 4-25.0 3-30.0	240.0			Same as # 142 Metal on Masonry
4		Down the Valley of Nied	Road Holling to Anzeling	Holling	Nied	1-10.0 to 1-12.0		4.0		Metal
5		"	Road Metz to Bouzonville	Freistroff	"	3-10.0	40.0	7.0		Masonry
6		"	Railroad Thionville to Volklingen	Bouzonville	"	4-10.0	45.0			Same as # 54 and # 78. Metal on Masonry
7		"	Foot-path	"	"			1.2		Footbridge
8		"	Road Bouzonville to Thionville	"	Branch of Nied	2-7.9 4-9.8	70.0	8.0		Arranged to be mined Masonry
9		"	"	"	"	2-9.7	25.0	8.0		"
10		"	Footpath	Heckling	"	2.0				Spans on Masonry
11		"	Road Filstroff to Bouzonville	"	Rau Bibiche	1-6.0				Masonry
12		"	Road from Filstroff to main Road	Filstroff	Nied	3-8.0	26.0	5.8		"
13		"	Road Guerstling to Remeldorf	Guerstling	"	2	20.6	2.5		Wood spans on Masonry
14		"	Road Nied-Altdorff to Biren	Nied-Altdorff	"	4-8.0	40.0	8.2		Masonry

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	INDEX	ROUTE	DESCRIPTION	SITE OF BRIDGE		DETAILS OF BRIDGE				SARREGUEMINES - N.W.
12										
11										
10										
9										
8										
7										
6										
5										
4										
3										
2										
1										

ITEM	INDEX No ON MAP	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					SARREGUEMINES - N.W. BRIDGES # 2
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	
15		Down the Valley of Nied	Road Kerperich-Hemmersdorf to Oros-Hemmersdorf	Kerperich-Hemmersdorf	Nied	5-6.0 1-8.0	50.0	6.0		Masonry	
16		"	Road Shiftrof to Emestrof	Schiftrof	"	4-8.0	40.0			"	
17		"	Road to Saarlouis	Emestrof	"	2-10.0				"	
18		Down the Valley of Rau Prims	Road Dilling to Saarlouis	Dilling	Two Channels of Rau Prims	9-				"	
19		"	R.R. Dilling to Primsweiler	"	Rau Prims	4	40.0			Same as # 139 Metal on Masonry	
20		"	R.R. Saarbrucken to Karthaus	"	"	9-9.4	84.7			Same as # 113 Masonry	
21		Down the Valley of Rau Bist	Road Uberherrn to Bisten	Uberherrn	Rau Bist						
22		"	Road to Mill	Bisten	"						
23		"	Road Linslerhof to Bourg — Dauphin	"	"						
24		R.R. Thionville to Volklingen via Teterchen & Hergarten	Two Tracks	Metzervisse	R.R. under road Thionville to Saarlouis						
25		"	"	"	R.R. under road Metzerisch to Budingen	1-4				Masonry	
26		"	"	Kedange	R.R. Under road Thionville to Saarlouis						
27		"	"	"	R.R. over the two branches of Rau Conner		30.0			Metal. Skew	
28		"	"	"	R.R. over Rau	1				Masonry	
29		"	"	"	R.R. over road Hambourg to Dalstein						
30		"	"	"	R.R. over local road						
31		"	"	"	R.R. under R.R. Merzig to Bettsdorf						
32		"	"	Budange	R.R. under local road						
33		"	"	"	R.R. over Rau and local road	5-36.0	190.0			Metal spans height 65 ft. on Masonry	
34		"	"	"	R.R. over local road	1-6.0				Metal	
35		"	"	"	R.R. over Rau	1-3.0				Masonry	

NO.	INDEX NO.	ROUTE NO.	DESCRIPTION OF LOCATION	SITE OF BRIDGE	DETAILS OF BRIDGE	SARREGUEMINES AV

ITEM	INDEX No. ON MAP	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				NOTES	SARREGUEMINES No. BRIDGES # 3
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY		
36		R.R. Thionville to Volklingen via Tetarchen & Hargarten	Two Tracks	Budange	R.R. Under local Road					Masonry. Width of road 4.0 M	
37		"	"	"	R.R. over road Aboncourt to Ebersviller					" " " " 5.0M	
38		"	"	"	R.R. over local road						
39		"	"	Ebersviller	R.R. over road at station						
40		"	"	"	R.R. over Rau Hirkenbach	1-2.0				Masonry	
41		"	"	"	R.R. under road Hestroff to Ebersviller						
42		"	"	"	R.R. over road Hestroff to Edling						
43		"	"	"	R.R. over Rau					Masonry. Culvert	
44		"	"	"	"					Culvert	
45		"	"	"	R.R. over local road						
46		"	"	"	R.R. over Rau	1-4.0				Masonry. Culvert	
47		"	"	"	R.R. over Rau Piblange					same as #71	
48		"	"	Anzeling	R.R. over Footpath					same as #72 Footbridge	
49		"	"	"	R.R. over local road					same as 73	
50		"	"	"	R.R. over Rau Anzeling	1-8.0				Arranged to be mined Masonry. Same as #74	
51		"	"	"	R.R. over road Anzeling to Holling					same as 75	
52		"	"	Freistroff	R.R. over Footpath					same as 76 Footbridge	
53		"	"	"	R.R. over flood opening	4-11.7				same as 77 Metal on Masonry	
54		"	"	"	R.R. over the Nied	1-11.0				same as #6 and 78 Metal on Masonry	
55		"	"	Bouzonville	R.R. over road Bouzonville to Vaudreching	1-6.0				same as #79 Metal	
56		"	"	"	R.R. under road Bouzonville to Brettnach	1-16.0	16.0			Masonry	

INDEX | ROUTE | DESCRIPTION | SITE OF BRIDGE | DETAILS OF BRIDGE | SURVEYS-N.W.

SARREGUEMINES-N.W.
BRIDGES-# 4

ITEM	INDEX Nº ON MAP	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
57		R.R. Thionville to Volklingen via Tatgerchen & Hargarten	Two Tracks	Bouzonville	R.R. over R.R. Metz to Dillingen	1				same as 80 Metal girders on masonry
58		"	"	"	R.R. over Rau					Masonry culvert
59		"	"	"	R.R. over road Vaudreching to Alzing					
60		"	"	"	R.R. over Rau Ohlig-Bach	1-4.0				Masonry
61		"	"	"	R.R. over local road					
62		"	"	"	R.R. over local road and Rau					
63		"	"	"	R.R. over road Brettnach to Velving					
64		"	"	Brettnach	R.R. under road Brettnach to Velving					
65		"	"	"	R.R. over Rau					Masonry
65 A		"	"	Uberherrn	R.R. over irrigation ditch					Culvert
66		R.R. Metz to Dillingen	"	Piblange	R.R. over road Hestroff to Megange					
67		"	"	"	R.R. over Footpath					Footbridge
68		"	"	"	R.R. under road Hestroff to Gommdange					
69		"	"	"	R.R. over Rau and footpath					
70		"	"	"	"					
71		"	"	"	R.R. over Rau Piblange					same as # 47
72		"	"	Anzeling	R.R. over Footpath					same as # 48 Footbridge.
73		"	"	"	R.R. over local road					same as # 49
74		"	"	"	R.R. over Rau Anzeling	1-8.0				same as # 50 Masonry. Arranged to be mined
75		"	"	"	R.R. over Anzeling to Holling					same as # 51
76		"	"	Freistroff	R. R. over Footpath					same as # 52 Footbridge

ITEM	INDEX No. ON	ROUTE ROAD, RAILROAD	DESCRIPTION OF	SITE OF BRIDGE	DETAILS OF BRIDGE PRIN.	TOTAL	WIDTH	WIDTH	SARREGUEMINES-N.W.

ITEM	INDEX No. ON MAP	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE NEAREST TOWN	SITE OF BRIDGE OVER	DETAILS OF BRIDGE PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	SARREGUEMINES-N.W. BRIDGES-# 5
77		R.R. Metz to Dillingen	Two Tracks	Freistroff	R.R. over flood opening	4-11.7				Same as #53 Metal on Masonry	
78		"	"	"	R.R. over the Nied	1-11.0				Same as #6 and #54 Metal on Masonry	
79		"	"	Bouzonville	R.R. over road Bouzonville to Vaudrecheing	1-6.0				Same as #55 Metal.	
80		"	"	"	R.R. under R.R. Thionville to Volklingen	1				Same as #57 Metal girders on Masonry	
81		"	"	"	R.R. over Rau Ohlig-Bach						
82		"	"	"	R.R. over road Bouzonville to Spartlouis	1-8.0				Metal girders on Masonry	
83		"	"	"	R.R. over Rau					Culvert	
84		"	"	"	R.R. over road Bouzonville to Nied Altdorff	1-6.0				Masonry	
85		"	"	"	R.R. over road Hackling to Aideling						
86		"	"	Filstroff	R.R. under road Filstroff to Bouzonville	3-8.0	35.0			Reinforced Concrete.	
87		"	"	"	R.R. over Rau					Culvert	
88		"	"	"	R.R. over road Filstroff to Bouzonville					Metal	
89		"	"	"	R.R. over local road at Guerstling						
90		"	"	"	R.R. over road Guerstling to Niedwelling	1-6.0				Masonry	
91		"	"	"	R.R. over Foot path					Footbridge	
92		"	"	Guerstling	R.R. over valley of the Inarbach and road Nied-Altdorf to Diren.	2-27.0 2-23.0				Metal on Masonry	
93		"	"	"	R.R. over road Nied-Altdorff to Kerperich-Hemmersdorf						
94		"	"	"	"						
95		"	"	"	R.R. under road at Station Kerperich-Hemmersdorf	1-10.0	24.0			Reinforced Concrete.	
96		"	"	Kerperich-Hemmersdorf	R.R. over Rau					Culvert	
97		"	"	"	R.R. over road K-H. to Gerstlingen						

ITEM	INDEX Nº ON MAP	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				
				NEAREST TOWN	OVER	PRIN. SPANS.	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
98		R.R. Metz to Dillingen	Two Tracks	Kerperich — Hemmersdorf	R.R. over Rau Birken-Bach					
99		"	"	"	R.R. over Rau					Culvert
100		"	"	Biren	R.R. under road Hirdspach to Relling					
101		"	"	"	R.R. over Rau Muhlbach					
102		"	"	"	R.R. over road Trier to Saarlouis					Metal
103		"	"	"	R.R. over local road					
104		"	"	"	R.R. over branch of the River Saare and local road	1-50.0 2-38.0				same as #1 Metal spans on Masonry
105		"	"	"	"	4-17.0				same as #1 Masonry
106		"	"	"	R.R. over Irrigation Ditch					
107		"	"	Patten	R.R. over road of Patten to Saare					Masonry
108		"	"	"	R.R. over Rau and local road					"
109		"	"	"	R.R. over R.R. Saarbrucken to Karthaus					same as # 120 Metal
110		"	"	"	R.R. over Rau Patten					Masonry
111		"	"	"	R.R. under road Patten to main road					
112		"	"	"	R.R. under road Patten to Dilling					Metal
113		R.R. Saarbrucken to Karthaus	"	Dilling	R.R. over Rau Prims	9-9.4				same as # 20 Masonry
114		"	"	"	R.R. over local road					Masonry
115		"	"	"	R.R. over Canal of Rau Prims	2-5.55				Masonry
116		"	"	"	R.R. under road Dilling to Saare	1-15.0				same as # 136 Metal
117		"	"	"	R.R. under road Patten to Dilling	1-20.0				Metal
118		"	"	"	R.R. under road Patten to main road					

ITEM	INDEX NO. ON MAP	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				SARREGUEMINES-N.W. BRIDGES-# 7
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
119		R.R. Saar-brucken to Karthaus	Two Tracks	Dilling	R.R. over Rau Patten	1-3.76				Masonry
120		"	"	"	R.R. under R.R. Metz to Dilling					same as #109 Metal. Skew
121		"	"	"	R.R. over Rau	1-1.9				Masonry, culvert
122		"	"	"	R.R. over Irrigation Ditch					Culvert
123		"	"	Patten	"					"
124		"	"	"	"					"
125		"	"	"	R.R. over local road					Masonry
126		"	"	"	R.R. over Rau Condeler Bach					"
127		"	"	"	R.R. over road Becking to Relling					"
128		"	"	"	R.R. over Rau Becking	1-5.55				"
129		"	"	Becking	R.R. over flood opening					
130		"	"	"	R.R. over Rau and Fremestrof road					
131		"	"	Fremestrof	R.R. over road Bitzing to main road	1				Masonry
132		"	"	"	R.R. over Rau Harling					Culvert
133		"	"	"	R.R. over road Harling to main road	1				Masonry
134		"	"	"	R.R. under R.R. Merzig to Bettsdorf					
135		"	"	"	R.R. under road Saarlouis to Trier					Masonry
136		R.R. Dilling to Primsweiler	One Track	Dilling	R.R. under road Dilling to the Saare	1-15.0				same as #116 Metal
137		"	"	"	R.R. over canal of Rau Prims	2-5.55				Masonry
138		"	"	"	R.R. over local road	1				"
139		"	"	"	R.R. over Rau Prims	4	40.0			same as #19 Metal on masonry

DETAILS OF BRIDGE

ITEM	INDEX Nº ON MAP	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE NEAREST TOWN	SITE OF BRIDGE OVER	DETAILS OF BRIDGE PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	SARREGUEMINES-N.W BRIDGES-" 8.
140		R.R. Thionville to Karthaus	Two Tracks	Berg	R.R. over Rau Krahengraben	1-2.7				Metal culvert	
141		"	"	"	R.R. over Rau	1.2.2				" "	
142		R.R. Betts dorf to Mertzig	One Track	Meckring	R.R. over the Saare	1-50.0 4-25.0 3-30.0	246.0			same as # 3 Metal on masonry, arranged to be mine	

No.	Index No. on Map	Route Road, Railroad, Canal, or River	Description of Road	Nearest Town	Bridge Over	Details of Bridge: Main Spans	Total Length	Width of Roadway	Notes
140		F.P. Thiensville to Northern	Two Tracks	Berg	R.R. over Pas Krabbenbach	1-57			Metal Culvert
141		"	"	"	R.R. over Pas	1-52			"
142		F.P. Brennert to Martin	One Track	Mackford	R.R. over Mr Sparta	1-55-1-55-1-55	2-6		Same as #5 Metal on masonry, abutments top mas


Bridge #1


Dillingen a. d. Saar. Hochofenanlage. Bridge #18

G. H. Q. – A. E. F.
SECOND SECTION, GENERAL STAFF

MONOGRAPH
ON
WATERWAYS, ROADS, RAILROADS, AND BRIDGES

[10]

QUADRANGLE
SARREGUEMINES SOUTHWEST

PRINTED BY
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G. H. Q., A. E. F.
SECOND SECTION, GENERAL STAFF

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QUADRANGLE
SARREGUEMINES SOUTHWEST

INDEX

G. H. Q., A. E. F.
SECOND SECTION, GENERAL STAFF

MONOGRAPH

ON

WATERWAYS, ROADS, RAILROADS, BRIDGES

TO

Accompany Road and Bridge Map

SARREGUEMINES SOUTHWEST

EXPLANATION

The information herein contained relates in detail to the following subjects:

WATERWAYS
- Canals
- Rivers
- Important Creeks

RAILROADS
- Main Lines
- Secondary Lines
- Narrow Gauge Lines

VILLAGES, TOWNS AND CITIES

ROADS AND HIGHWAYS
- National Roads
- Department Roads
- Communal Roads

BRIDGES
- Highway Bridges
- Railroad Bridges
- Canal and River Bridges

The area included in this monograph is included in the 1:50,000-scale map of the French government as shown on the index map included herewith and in the subdivision of the monograph. The 1:50,000-scale map is in turn a subdivision of the 1:80,000 and the 1:200,000-scale maps, upon which the various area sheets are named as shown upon the index map. The 1:50,000-scale map of roads and bridges which accompanies the monograph is named as a subdivision of the 1:80,000-scale map. Thus: Sarreguemines Southwest.

General information is given as follows for the area in question:

The nature and character of streams, lakes, ponds, etc.;
The character and importance of railroads;
The nature and construction of the roads and connections;
The villages, towns, and cities.

Specific information is given as follows for the area in question:

Size of canals, dimensions and number of locks, with size and capacity of boats, etc.
Rivers, their character, size, fords, etc.
Railroads, number of tracks, clearance, roadbed, grades, cuts and fills, etc.
Roads, width, grade, width and nature of pavement.
Bridges: location as to stream, railroad or highway; number of spans, class of construction, width of highway, etc. Photographs, etc., where possible.

Bridge information is given as follows:

(a) As being over an important stream.
(b) As being on a railroad;
(c) As being on a highway.

In this way most bridges appear twice and are cross-indexed. Location of bridges is shown upon maps and in the case of cities, a larger map is given showing bridges.

Strength of Bridges.—No data is available as to the strength of bridges. Railroad structures will probably carry any load coming on them from ordinary traffic. When any load heavier than engine concentration is to be carried, the bridge should be examined.

Highway bridges of masonry will probably carry any load up to 12 tons on one axle. Heavier loads should be distributed if the filling of earth over the arch ring is less than one foot deep. No statement can be made as to the strength of metal bridges, as they vary as to design and material. As a rule, the older ones were designed for light loads.

SUPPLEMENT

As additional information is obtained it will be issued as an addendum to this monograph. When using this monograph, always examine the supplement.

Sources of Information

Maps of the area, either French or German.

Notices of the Departments or of foreign regions issued by the Ministre de la Guerre, Commission de Geographie du Service Geographique de l'Armee.

Guide books, photographs, etc.

Abbreviations

Abut., abutment
C. I., cast iron
Met., metal
Mas., masonry
Timb., timber
Br., bridge
Riv., river
rau., ruisseau (small stream)
R. N., route nationale
G. C. D., department or important road
Canl., canal
I.C., communal or country road

Table of French and German Terms with English Equivalents

Bois	Woods	Wald
Canal	Canal	Kanal
Chemin de Fer	Railroad	Eisenbahn
Cheveaux	Horses	Pferde
Citerne	Tank	Behalter
Commune	Township	Gemeinde
Canton	District	Gebiete
Droite	Right	Recht
Est	East	Ost
Etang	Pond	Teich
Ecluse	Lock	Schleusze
Embranchement	Branch	Abzeigung
Exploitation	Working	Arbeits
Ferme	Farm	Hof
Fleuve	River	Fluzs
Gauche	Left	Links
Genie	Engineer (military)	Pioneer
Grande Communication	Main Communication	Haupt Verbindung
Gue	Ford	Furt
Hauteur	Height	Hoch
Kilogramme	Kilogram	Kilogram
Kilometre	Kilometer	Kilometer
Longeur	Length	Lange
Largeur	Width	Breite
Metre	Meter	Meter
Mont	Hill	Hugel
Maison	House	Haus
Nord	North	Nord
Ouest	West	West
Overture	Opening	Offnung
Pont	Bridge	Brucke
Passage Inferieur	Undergrade Crossing	Weg uber den Eisenbahn Linien
Passage Niveau	Grade Crossing	Bahnkreuzung
Passage Superieur	Overgrade Crossing	Weg unter den Eisenbahn Linien
Ruisseau	Brook	Bach
Riviere	Creek	Strom
Sud	South	Sud
Source	Spring	Spring Quelle
Voiture a 2 Roues	2-Wheeled Wagon	Waggon mit 2 Radern
Voiture a 4 Roues	4-Wheeled Wagon	Waggon mit 4 Radern

DESCRIPTION

The Lorraine Rhinish Prussia border cuts the extreme northeast corner of this quadrangle, leaving but a very small area on the Prussia side of the line. The central feature of the quadrangle is the Nied valley, which crosses from south to north. The two branches of the stream, coming in from the southwest and southeast, join at Conde Northen to form the Nied. Other streams in the quadrangle are very small. The Nied valley is wide and contains low meadows, which are cut by small irrigation and drainage ditches. The stream overflows the meadows, making the soil marshy so that crossing the valley would be difficult except during the dry summer months. The hills slope back gently from the edges of the valley, reaching heights varying from 15 to 130m. (49 to 426 feet). The rolling hill country is for the most part covered with forests, that is particularly true of areas in the eastern and northwestern sections of the quadrangle. St. Avold is the largest town, while Teterchen and Hargarten are the most important railroad centers in the quadrangle.

WATERWAYS

The Nied

The stream begins its course in the center of this quadrangle at the junction of the French and German branches, flows north and leaves the quadrangle near the town of Gommelange. From point of leaving this quadrangle the stream flows in a northeastly direction and into the Sarre near the town of Relling, in Sarreguemines N.W. Has a length of approximately 50km., width 20m. to 30m. and depth of 2m. to 4m. (6.6 to 13 feet). Its valley is wide, consisting of low meadows which are cut by irrigation and drainage ditches. The banks are so low that the water often overflows the surrounding fields for a considerable distance. Poplar and willow trees line the banks. While the stream is fordable in many places during summer months, the overflow condition makes approach generally difficult.

Features along stream course:

Flass-Garten Mill. Ford. Mill dam. Channel narrow, 8m. to 10m. (26 to 33ft.), banks steep. Ford below island narrow and of little use for vehicles.

Gommelange. Stream deep and banks steep.

The bridges are listed under that heading.

The French Nied

This branch of the Nied has its source in the southern part of Sarrebourg N.W., enters this quadrangle near the town of Villers Laquenexy, flows northeasterly to Conde Northen, where it joins with the German branch to form the Nied. Its upper length is described in Sarrebourg N.W. The lower section runs through wide fields, is bordered by willow trees and stream bed is covered with reeds. The banks are low and of soft earth. Its total length is 55km. and for the lower section width from 8m. to 15m. (26 to 49 feet), and depth 1m. to 2m. (3.3 - 6.6 feet).

The bridges are listed under that heading.

The German Nied

The German Nied rises near the town of Marienthal in Sarrebourg N.E., flows in a northwesterly direction, crosses Sarrebourg N.W., enters this quadrangle near Guinglange and finally joins the French Nied at Conde Northen. Its total length is 57km. and just above Conde Northen the width is 11m., depth 3m. (9.8 feet).

The stream is winding although the current is more swift than that of the French Nied. Banks are steep and in many places stream bed is rock. Floods have been frequent and have forced the raising of embankments for both railroads and highways. The flood conditions have been somewhat relieved by raising the mill dam sluices. For description of upper section of stream, see Sarrebourg N.W.

Features along stream course:

Guinglange Mill. Above the dam the stream is very deep and has width of 6m. Banks covered with poplars and willows. Ford down stream from flood gates of mill. Approaches to ford somewhat steep.

Guinglange. Ford near and up stream from bridge, approaches slope down stream and banks cut down. Ford at confluence of Ruisseau Hemilly (on left) above the village, depth 0.7m. to 1.5m. (2.3 to 4.9 feet).

Pt. Helefedange. Stream deep.

Bionville. Stream deep, banks steep.

Bizingen Mill. Channel narrow, width 5m., and deep, not fordable.

Varize. Ford.

Steidbrucken Mill. Ford a short distance above bridge, with approaches graded.

The bridges are listed under that heading.

Ruisseau Presbach

Small stream affluent of the German Nied on the right with confluence near Fouligny. Length 9km. and is crossed by four bridges.

Ruisseau Doretzel

Confluence on the right of the German Nied at Volmerange. Length, 5.6km., crossed by three bridges, two of which are bridges No. 99 and No. 100.

Ruisseau Schwelbach

Confluence on the right of the Nied at Eblange. Length, 7.5km., and is crossed by seven bridges, of which one is Bridge No. 49.

Ruisseau Bist

Affluent on the left of the Sarre. Rises at Bistem im Loch, flows past Hamsous-Varsberg, forms the boundary between Lorraine and Rhinish Prussia from town of Creutzwald to Ueberherrn in Sarreguemines N.W. From Creutzwald north the banks are low and surrounding fields swampy. The stream is crossed by the line Courcelles Saargemund, on Bridge No. 125 near Creutzwald, and by the line Thionville-Volklingen on Bridge No. 80 on the north line of quadrangle. The lower section crossing Sarreguemines N.W. is described in that quadrangle.

RAILROADS

Line: Metz to Dillingen

The section of the line located in this quadrangle enters near Vigy on the west and leaves near Drogny on the north, a distance of 12.2km. Double-track, standard-gauge line. For preceding section and general description of whole line, see Metz S.E.

Important points on line:

Cut. Length, 200m.
Overgrade crossing. Local road. Metal bridge. Bridge No. 52.
End of cut.
Cut. Length, 900m.; max. depth, 17.5m.
Overgrade crossing. Road from Vigy to Bettsdorf. Bridge No. 53.
End of cut.
Fill. Length, 700m.
Undergrade crossing. Road from Vigy to the Quinze Pieds Bois. Bridge No. 54.
Entrance into the Forest of the Quinze Pieds.
End of fill.
Cut. Length, 600m.
Overgrade crossing. Forest lane. Metal bridge. Bridge No. 55.
Exit from the Forest of the Quinze Pieds.
End of cut.
Fill. Length, 250m.
Cut. Length, 200m.
Cut. Length, 250m.
Overgrade crossing. Local road. Metal bridge. Bridge No. 56.
End of cut.
Entrance into the Altdorf Forest.
Fill. Length, 100m.
Culvert over a brook. Bridge No. 57.
Undergrade crossing. Local road. Bridge No. 58.
End of fill.
Cut. Length, 500m.
Overgrade crossing. Road from Bettsdorf to St. Hubert. Metal bridge. Bridge No. 59.
Station at Bettsdorf. Conditions arising from the construction of the Bettsdorf-Merzig line forced a rebuilding of this station in 1914. Before that date it consisted of: Receipt building to the left; telegraph office; freight shed; commercial platform; 25-ton scales; 6-ton crane. Alt. 232.2m.
Max. up grade between Bettsdorf and St. Hubert, 0.5 per cent.
End of cut.
Fill. Length, 300m.
Culvert over a brook. Bridge No 60.
Undergrade crossing. Road from Altdorf to Saint Hubert. Metal bridge; two spans (independent) of 4.8m. and an opening of 4m., spaced 3.5m. from axis to axis and each affording a passage for a single track. Each span is built of two straight latticed girders, braced at a height of .055m. and spaced 2.2m.; of two intermediate girders, 0.3m. high and spaced 1.5m. Masonry abutments; metal railings; one service sidewalk, 1.04m. wide, is encorbelled on the exterior side of each span and another is placed between the spans (2.10m. wide). Total length of the bridge, 6.8m. Bridge No. 61.
End of fill.
Cut. Length, 250m.
Fill. Length, 350m.
Undergrade crossing. Road from Saint Hubert to the Altdorf Forest. Bridge No. 62.
End of fill.
Exit from the Altdorf Forest.
Viaduct over the valley of the Kanner Bach, the road from Nodlingen to Bettsdorf and the road from Endorf to Saint Hubert. Metal viaduct; nine spans of 22m. opening each; latticed American bowstring fish bellied girders; superstructure; eight metal piers, quadrangular and formed by vertical tie

beams braced at a spacing of 8m.; concrete foundations. The concrete flagstones of the six last piers (coming from Metz) rest on piles of wood sunk into the flagstones. Masonry abutments, 16m. long, each pierced by a vault, semi-circular, 5m. opening. Max. clearance of 20.95m. Total length of the bridge, 294m.; of the metal part, 262m. The stream passes under the fourth span (coming from Metz); the Nodlingen-Bettsdorf road passes under the first abutment and the Endorf-St. Hubert road under the vault of the second abutment. Bridge No. 63.

Fill. Length, 400m.

Viaduct over the valley of the Villers Bach. Metal viaduct; six spans of 22m. opening each, American bowstring fish bellied latticed girders; superstructure on a grade of 1-200; five quadrangular metal piers formed of vertical tie-beams braced at a distance of 8m.; masonry abutments 16m. long, each pierced by a semi-circular vault of 5m. opening; concrete foundations. The concrete flagstones of the six piers and the two abutments rest on wooden piles sunk in the flagstones. Clearance max., 18.97m. Total length of the bridge, 204m.; of the metal part, 172m. The stream passes under the second span in coming from Metz. Bridge No. 64.

Entrance into the Forest of Villers Brettnach.

Fill. Length, 100m.

Cut to the right. Fill to the left, 1.5km. long.

Overgrade crossing. (Entrance to the following station.) Road from Villers Brettnach to Saint Bernard. Bridge No. 65.

Way Station at Saint Hubert. Receipt building to the right; freight shed to the right after passing the receipt building; 50m. platform for the loading of wood; 25-ton scales; 6-ton crane; two sheds, 60m. and 40m. long, 12m. wide, separated by the platform; one 150m. siding to the right, blind at both ends and joined to the main tracks by two switches. Alt. 237.8m.

Max. down grade between Saint Hubert and Piblingen, 0.5 per cent.

Cut. Length, 700m.

Saint Bernard Tunnel. Length, 925m. The highway Saint Bernard-Gondreville passes over the tunnel.

Exit from the Villers Brettnach Forest.

Cut. Length, 1km.

Overgrade crossing. Local road. Metal bridge. Bridge No. 66.

End of cut.

Two culverts over two brooks. Bridges No. 67 and No. 68.

Fill. Length, 1.6km.

For continuation of line, see Sarreguemines N.W.

LINE: THIONVILLE TO VOLKLINGEN VIA TETERCHEN AND HARGARTEN

The section of line located in this quadrangle enters near the town of Velving on the north and leaves at the extreme northeast corner, a distance of 13.2km. It is part of a double-track standard-gauge main line. The section between Teterchen and Hargarten is combined with the double-track line from Courcelles to Saargemund into a four-track line. For preceding section and general description of whole line, see Metz N.E. and Sarreguemines N.W.

Important points on line:

End of fill.

Fill. Length, 200m.; max. height, 5m.

Cut. Length, 250m.; max. height, 3.2m.

Cut. Length, 300m.; max. height, 3.3m.

Fill. Length, 500m.; max. height, 8.9m.

Station at Teterchen. Four main tracks, two to the left for the Diedenhofen-Volklingen line, two to the right for the line Courcelles-Saargemund. These two sets of tracks are linked together by a switch.

In the angle formed by the above-mentioned lines: Receipt building; telegraph office; underground passage giving access from the highway to the receipt building and to the passenger platforms; freight shed, 30m. x 10m.; two commercial platforms, one adjoining to the freight shed and the other to the left of the Courcelles-Saargemund tracks; 25-ton scales; 6-ton crane; stone platform, 80m. x 14m.; siding to the right of the Volklingen line,

switched in the direction of Brettnach and blind at the other end; three sidings to the left of the Saargemund line, switched in the direction of Bolchen and blind at the other end, serve the freight station and the platform; one 500m. siding, double-entry, to the left of he Diedenhofen-Volklingen line; two 550m. double-entry sidings to the right of the Courcelles-Saargemund line allow the trains coming from Metz to run directly upon the tracks toward Volklingen and vice versa; 650m. long military platform to the right, served by two 650m. double-entry sidings switched upon the Courcelles-Saargemund line; 16m. diameter turntable, served by a siding switched on the Saargemund line and blind at other end; 500-ton coal depot. Alt. 269.4m.

Max. down grade between Teterchen and Hargarten, 1 per cent.

The line is joined on the right, at the exit from the preceding station, by the double-tracked Courcelles-Saargemund line and forms with it, as far as Hargarten, two parallel and independent currents. Four main tracks on the same roadbed.

Cut. Length, 300m.; max. depth, 22m.; bank to 1-2 and 1-1 in limestone.

Teterchen Tunnel. Length, 997m. Two tunnels parallel and each giving passage to two tracks. Huge facades of sandstone. Semi-circular vaults in masonry. Ventilating shafts approximately 250m. from the entrance. The tunnel on the left was the only one in existence before the quadrupling of the Teterchen-Hargarten section; this tunnel had eight mine chambers arranged in each foot in two series of four each, one of these series 1.3m. and the other 0.15m. above the rails.

Cut. Length, 250m.; max. depth 22.7m. Two powder magazines in this cut.

Fill. Length, 700m.

Undergrade crossing. Road from Teterchen to Hargarten. Masonry bridge; one arch of 6m. opening; clearance 6.5m. Bridge No. 69.

Undergrade crossing. Road from Hargarten to Benchels Bois and Gross Rupelstuden. Masonry bridge; one arch of 4m. opening. Bridge No. 70.

End of fill.

Cut. Length, 120m.; max. depth 22m.; bank to 1-2 to 1-1 in limestone.

Hargarten tunnel. Length, 376m. Two parallel passages, each giving passage to two tracks. Vaults, facade, mine chambers arranged in the same manner as in the preceding tunnel.

Cut. Length, 554m.; max. depth 22.7m. Two powder magazines in the cut.

Fill. Length, 660m.; curve.

Undergrade crossing. Road from Hargarten to the Saint Victor Farm; masonry bridge; one arch of 3.5m. opening. Bridge No. 71.

Culvert over the Hellenmuhle Rau. Bridge No. 72.

End of fill.

Cut. Length, 800m.

Overgrade crossing (entrance to the following station). Road from Falk to Hellenmuhle and to the military platform at Hargarten. Metal bridge. Bridge No. 73.

Station at Hargarten. 20m. x 10m. Receipt building to the left; telegraph office; underground passage linking the receipt building to the passenger platform; five main tracks: two to the left for the Diedenhofen-Volkingen line, two in the middle for the line Courcelles-Saargemund and one turnout to the right used by both lines; three switches between these five tracks. Freight shed, 15m. x 6m., to the left adjoining the receipt building on the side coming from Diedenhofen; two commercial platforms on the left, one of which, 40m. x 6m., adjoins the freight shed on the side coming from Diedenhofen; the other is at the entrance to the station; 25-ton scales; 1 and 6-ton cranes; stone platform 130m. x 15m.; four sidings: Two 250m. and 300m. to the left, switched in the direction of Teterchen and blind at the other end, serve the freight shed and the commercial platform; two 200m. each, to the left, switched in the same direction, serve the second platform; 20m. diameter turntable to the right, with a siding between the lines, at the exit from the station; 500-ton coal depot to the left near the shed; 106cu.m. watertank supplied by a steam pump from the Hellenmuhle Rau.; one siding switched from the main tracks in the direction of Teterchen and blind at the other end;

system of four sidings, double entry, 465m. and 505m. each, to the right; masonry military platform, 600m. x 6m., to the right of the Courcelles line, served by two double entry sidings and with an approach from the Falk-Hellenmuhle highway; two switch towers (Saxby), one at the entrance to and the other at the exit from the station. Alt. 228.9m.

Max. down grade between Hargarten and Ueberherrn: 0.85 per cent.

Undergrade crossing. (Exit from the preceding station.) Hargarten-Kreuzwald highway. Metal bridge; one span of 8m.; superstructure renewed in 1913. Bridge No. 74.

Branch to the left. (Directly after the preceding undergrade crossing). Freight and military extension, double track, to the Courcelles-Saargemund line. This line describes a pronounced curve towards the south and then crosses the Volklingen line on the following bridge, another double-track military extension between the same lines, and finally two roads.

End of fill.

Cut. Length, 1.2km.

Overgrade crossing. Extension (military) from the Hargarten station towards Saargemund. Bridge No. 75.

Branch to the right. Military extension (double track) from Ueberherrn to the line Courcelles-Saargemund.

Overgrade crossing. Road called "Blauer Kreuz Weg". Bridge No. 76.

End of cut.

Fill. Length, 2.7km.

Bridge over the Glockenhoferbach. Masonry bridge; one arch. Bridge No. 77.

Undergrade crossing. Road from Biblingen to the Glockenhof Farm. Masonry bridge. Bridge No. 78.

Bridge over the Alte-Bist. Bridge No. 79.

Frontier of the Rhine Province.

Bridge over the Muhlenbach. Bridge No. 80.

End of fill.

Cut. Length, 700m.

Overgrade crossing. Road from Ueberherrn to the Merthen-Kreuzwald highway. Bridge No. 81.

For continuation of the line, see Sarreguemines N.W.

Line: Courcelles to Saargemund

The section of line within this quadrangle extends from Villers Laquenexy on the south, through Hargarten and leaves at Carling on the east, a distance of 43km. It is part of a double-track standard-guage line. The section between Teterchen and Hargarten is combined with the double-track line from Thionville to Volklingen into a four-track line. Description for the very short section between Courcelles and south line of this quadrangle has been omitted from Sarrebourg N.W. because it contains no bridges and is given just preceding the section for this quadrangle.

Double-track main line. Standard gauge. Single-headed steel rails. Total length of the line 76.680km., of which 21.315km. are level, 55.365km. are grade, 43.324km. straight and 33.356km. curve. Maximum grade between stations varies from 1 per cent to .25 per cent; the maximum 1 per cent is reached at various points on its extent. Many curves and in general of small radius; minimum of 3200 feet or 7 deg. at the exit from Courcelles. Many and important cuts and fills. Constructions to notice: Three bridges over the French Nied, the German Nied and the Roselle; two tunnels between Teterchen and Hargarten and one tunnel entrance into the station at Saargemund. Locomotive sheds at Beningen and Saargemund. Water tanks at Courcelles, Bolchen, Teterchen, Hargarten, Beningen and Saargemund. The line is equipped with bell signals and telephone over its entire extent.

Station at Courcelles (Nied). (See the Metz-Saarbrucken line for a description of this station.) Alt. 217.4m.

Maximum up-grade between Courcelles (Nied) and Bange: 0.69 per cent.

Cut. Length, 400m.; curve.

Fill. Length, 1.2km.

Cut. Length, 300m.

Fill. Length, 400m.

Line enters the quadrangle Sarreguemines S.W.

Culvert over a brook. Bridge No. 82.
End of fill.
Cut. Length, 300m.
Fill. Length, 400m.
Undergrade crossing. Local road. Masonry bridge; one arch. Bridge No. 83.
Culvert over the Teich Bach. Metal bridge; one span. Bridge No. 84.
End of fill.
Cut. Length, 300m.; max. depth 6m.
Station at Pange. Receipt building to the right; telegraph office; freight shed to the left with a commercial platform 30m. long; 20-ton scales; 6-ton crane; one siding, 200m. long, to the left, blind at both ends and joined to the main tracks by one switch; stone platform 80m. x 10m. Alt. 220.3m.
Maximum down grade between Pange and Kurzel: 0.64 per cent.
Overgrade crossing. (Exit from the preceding station.) Road from Pange to Mont. Metal bridge, one span of 17m. Width of roadbed 5m. Clearance 7m. Bridge No. 85.
End of cut.
Fill. Length, 950m.; curve.
Undergrade crossing. Local road. Bridge No. 86.
End of fill.
Cut. Length, 500m.; max. depth, 8m.; curve.
Fill. Length, 700m.
Bridge over a branch of the Nied. Bridge No. 87.
Bridge over the French Nied. Masonry bridge; three arches of 10m. opening each; piers of 1.5m. thickness. Distance between average water level and the top of the rail 5.5m. Bridge not mined. Bridge No. 88.
Undergrade crossing. Local road from Chevillon to the meadows of the Nied. Masonry bridge; one arch of 4m. opening. Bridge No. 89.
End of fill.
Station at Kurzel. Receipt building to the right; telegraph office; freight shed to the right before coming to the receipt building; 25m. commercial platform; 25-ton scales; 6-ton crane; stone platform 150m. long by 15m. wide; one siding to the right serving the freight shed and the platform, switched in the direction of Pange and blind at the other end; military platform 720m. long to the left at the entrance to the station, served by two double-entry sidings of 515m.; access is given to this platform by the road which flanks the tracks and joins the Kurzel-Sillers and the Kurzel Station-Maizeroy roads. Shed 60m. x 8m. for the emperor's train to the left at the exit from the station, served by a 300m. siding switched in the direction of Pange before coming to the receipt building and ending in two 300m. sidings. Alt. 214.4m.
Maximum down grade between Kurzel and Landonvillers: 0.25 per cent.
Bridge over the Kurzel Rau. (Interior of the preceding station.) Masonry bridge; one arch of 7m. opening. Bridge No. 90.
Cut. Length, 200m.
Fill. Length, 1km; slight raise.
Culvert over a brook. Bridge No. 91.
End of fill.
Cut. Length, 600m; slight cut.
Fill. Length, 100m.
Cut. Length, 250m.
Station at Landonvillers. Receipt building to the right; telegraph office; freight shed to the left; 20m x 4m. commercial platform to the left; 25-ton scales; 4.8-ton crane; 110m. siding to the left, switched in the direction of Contchen and blind at the other end; stone courtyard 110m. x 6m. Alt. 212.15m.
Maximum up grade between Landonvillers and Contchen: 0.69 per cent.
Cut. Length, 250m.; max. depth, 5m.
Cut. Length, 250m.; curve.
Fill. Length, 2.3km.
Two undergrade crossings. Two local roads from Landonvillers to the Nied. Bridges No. 92 and No. 93.
Two culverts over two brooks. Bridges No. 94 and No. 95.

End of fill.
Cut. Length, 500m.
Station at Contchen. Receipt building 12m. long, 1-story, to the left; telegraph office; freight shed to the right; 30m. x 4m. commercial platform; scales; 4.8-ton crane; stone courtyard 110m. x 11m.; one siding 110m. long to the right, serving the freight shed and the platform; one siding, 400m. long, double-entry, to the right. Alt. 215.6m.
Maximum down grade between Contchen and Volmeringen: 0.76 per cent.
Cut. Length, 200m.
Bridge over the German Nied. Metal bridge; three spans, of which the central one is 12m. and the two lateral ones 4m. each; superstructure; piers and abutments of masonry; distance between the rail and average waterlevels 5m.; wing walls. Bridge No. 96.
Fill. Length, 1.3km.
Undergrade crossing. Local road from Lautermingen to the Nied meadows. Bridge No. 97.
End of fill.
Cut. Length, 200m.
Overgrade crossing. Road from Volmeringen to Helsdorf. Metal bridge; one span of 8m; masonry piers and abutments; length, 20m. Bridge No. 98.
Way station at Volmeringen. Exclusive passenger, baggage and express stop. Receipt building to the right; one small siding to the right, switched in the direction of Contchen and blind at the other end. Alt. 213.6m.
Maximum down grade between Volmeringen and Bolchen: 0.25 per cent.
Fill. Length, 300m.; curve.
Two culverts over the Doretzel Bach and one of its branches. Metal bridges; one span each. Bridges Nos. 99 and 100.
End of fill.
Cut. Length, 800m.; max. depth 10m.
Overgrade crossing. Local road. Bridge No. 101.
End of cut.
Fill. Length, 1.3km.
Undergrade crossing. Local road from Macher to Brechlingen. Bridge No. 102.
Two culverts over two brooks. Bridges Nos. 103 and 104.
Undergrade crossing. Local road. Bridge No. 105.
End of fill.
Bridge over the Kaltbach. Masonry bridge; one arch. Bridge No. 106.
Cut. Length, 400m.
Station at Bolchen. Receipt building, one story, 25m. x 5m., to the right; telegraph office; freight shed 30m. x 8m. to the right after passing the receipt building; 55m. x 8m. commercial platform; 25-ton scales; 6-ton crane; 120m. x 14m. stone courtyard; 300m. siding to the right switched in the direction of Teterchen and blind at the other end; 500m. military plaftorm to the right, served by two double-entry 515m. sidings with access afforded by a road which flanks the line and ends in the Bolchen-Volmeringen highway; 50cu.m. water tank to the right at the entrance to the station; 250-ton coal depot; one siding to the right at the entrance to the station, switched in the direction of Volmeringen and blind at the other end. Alt. 213.3m.
Maximum up grade between Bolchen and Teterchen: 1.0 per cent.
Bridge over the Muhlenbach. Metal bridge; two spans of 5m. each. Bridge No. 107.
Cut. Length, 1km.
Overgrade crossing. Bolchen-Teterchen highway. Metal skew bridge, two arches. Bridge No. 108.
End of cut.
Fill. Length, 1.8km.
Two bridges over the Muhlenbach, two metal bridges, one span each.
Undergrade crossing. Bolchen-Dentingen highway. Bridge No. 111.
End of fill.
Cut. Length, 1.6km.; max. depth 7m.
Knallhutte block station. Entrance to the system of sidings and the industrial extension to the Knallhutte (550m. average length).

Overgrade crossing. Road from Dentingen to Ottendorf. Masonry bridge; one arch of 10m. opening; stone railings. Width of the roadway 5m. Length of bridge 25 meters. Bridge No. 112.
Overgrade crossing. Local road. Bridge No. 113.
End of cut.
Cut. Length, 200m.
Three cuts. Length, 100m. each.
Culvert over a ravine. Bridge No. 114.
Cut. Length, 100m.
Cut to the right. Fill to the left, length 1.2km.
Station at Teterchen. (See the line Diedenhofen-Volklingen for the description of this station.) Alt. 269.4m.

Section from Teterchen to Hargarten

See the Diedenhofen-Volklingen line for a description of this line including the station at Hargarten.

Section from Hargarten to Saargemund

Important points on the line:
Station at Hargarten. Alt. 228.9m.
Level between Hargarten and Kreuzwald.
Fill. Length, 2.2km.
Entrance to the Huff Forest.
The line Diedenhofen-Volklingen strikes off to the left.
Branch to the left. Freight and military extension to the above mentioned line (direction of Ueberherrn).
Undergrade crossing. Hargarten-Kreuzwald highway. Metal bridge; one span of 8m. Bridge No. 120.
Branch to the left. Second military and freight extension to the above mentioned line (direction of Hargarten).
End of fill.
Cut. Length, 8m.; max. depth, 5m.
Overgrade crossing. Local road called "Hayinger Weg." Masonry bridge, one arch. Bridge No. 121.
End of cut.
Fill. Length, 500m.
Bridge over the Leibsbach. Masonry bridge, one arch. Bridge No. 122.
Undergrade crossing. Local road from the Houve Collieries to the Hargarten-Ham unter Varsberg highway. Bridge No. 123.
End of fill.
The line is paralleled on the left for a distance of about 800m. by the single-track 3km. long line which serves the Houve Collieries.
Cut. Length, 800m.; max. depth 7m.
Station at Kreuzwald. Receipt building to the left; telegraph office; freight shed to the left after passing the receipt building; 20m. commercial platform; 25-ton scales; 6-ton crane; one 180m. siding to the left serves the freight shed and the platform, blind at both ends and linked to the main tracks by two switches; 550m. military siding to the right served by two double-entry 500m. sidings; industrial siding to the Collieries of the Houve; terminus to the left, before reaching the receipt building, of the single-track line serving the Collieries of the Houve. Alt. 228.9m.
Maximum up-grade between Kreuzwald and Karlingen: 1.0 per cent.
Exit from the Huff Forest.
Fill. Length, 400m.
Undergrade crossing. Road from Kreuzwald to Ham. Bridge No. 124.
Bridge over the Bisten Bach. Bridge No. 125.
Viaduct over the valley of the Diesen Bach. Bridge No. 126.
Entrance into the St. Avold Forest.
Undergrade crossing. Local road. Bridge No. 127.
End of fill.
Cut. Length, 400m.; max. depth 7m.

Fill. Length, 300m.
Cut. Length, 600m.; max. depth 7m.; curve.
Overgrade crossing. Local road from Diesen to Kreuzwald. Bridge No. 128.
End of cut.
Fill. Length, 250m.
Cut. Length, 1.1km.; max. depth, 10m.
Overgrade crossing. Forest road. Bridge No. 129.
End of cut.
Fill. Length, 700m.
Exit from the St. Avold Forest.
Station at Karlingen. Receipt building to the right; telegraph office; freight shed to the right; 25m. commercial platform; 30-ton scales; 4, 8 and 6-ton cranes; two 350m. double-entry sidings to the right; 500m. military siding to the left at the entrance to the station, served by two 600m. sidings switched in the direction of Spittel and blind at the other end; access to this platform is afforded by a road which parallels the line and ends at the Kerlingen-Bisten highway. Alt. 243.2m.
Maximum down grade between Karlingen and Spittel Neuschacht: 0.83 per cent.
End of fill.
Cut. Length, 200m.
Fill. Length, 250m.; max. height, 10m.
Undergrade crossing. Road from Karlingen to Lauterbach. Masonry bridge; one arch of 5m. opening; clearance 6m. Bridge No. 130.
Culvert over the Lauterbach. Masonry bridge; one arch of 3m. opening. Bridge No. 131.
Cut. Length, 200m.
Fill. Length, 200m.
Undergrade crossing. Local road. Bridge No. 132.
End of fill.
Cut. Length, 1.1km.; max. height 6m.; curve.
Overgrade crossing. Road from Karlingen to Spittel. Masonry bridge, one arch of 20m. opening; elliptical arc; height under the intrados 6m.; total length of the bridge, 30m. Width of the roadway 6m. Bridge No. 133.
Overgrade crossing. Old Metz highway. Masonry bridge; one arch; elliptical arc of 20m. opening. Length of bridge 30m. Bridge No. 134.
End of cut.
Fill. Length, 200m.
For continuation of the road, see Sarreguemines S.E.

Line: Metz to Saarbrucken

The section of line in this quadrangle extends across the southeast corner for a distance of approx. 3km. Double-track standard-gauge main line. For preceding section and more complete description of whole line, see Metz S.E. and Sarrebourg N.W.

Important points on the line:
End of cut.
Fill. Length, 300m.
Undergrade crossing. Local road. Bridge No. 135.
Culvert over brook. Bridge No. 136.
End of fill.
Fill. Length, 1.5km.
Undergrade crossing. Road from Valmen to Altweiler. Bridge No. 137.
For continuation of the line, see Sarreguemines S.E.

Line: Bettsdorf to Merzig

Short section of this line in the northwest corner of quadrangle. Single-track standard-gauge line. See description of line in Sarreguemines N.W.

New German Lines

See the accompanying map of the quadrangle for lines built by the Germans and also see the addenda for changes due to information received later than the date of the map.

ROADS

The roads and highways of this section of France are divided into five classes and are shown on the accompanying map as follows:

(1) *National Roads* (Routes Nationales or R.N.).—Indicated by a double red line and marked R.N. No 3. for example. The width of the road between ditches is from 10m. to 12m. (33 to 40 feet). The width of the paved portion is from 5m. to 6m. (16 to 20 feet), but is generally 5 meters.

(2) *Department Roads* (Routes Departmentales or Rtes. Deples.).—Indicated by a single heavy red line and marked D. No. 10 or G.C.D. No. 10 for example. The width of the road varies from 8m. to 11m. (26 feet to 36 feet) between ditches but is generally 10m. (33 feet). The width of the pavement varies from 4m. to 6m. (13 feet to 20 feet).

(3) *Roads of Important Communications* (Chemins de Grande Communication Chins. de Gde. Com.).—Indicated by a single heavy red line and marked G.C. No. 10 for example. Width between ditches 8m. (26 feet); width of paving 4m. to 5m. (13 feet to 16 feet). For the purpose of this information and the accompanying maps, no distinction has been made between No. 2 and No. 3, the only difference seeming to be the width of the paving. Numbers of these roads are the same as the Department Roads from which they are made. Thus: Dept. Road No. 1 (Rte. Deple. No. 1) comes from Chin. de Gde. Com. No. 1 bis.

(4) *Country Roads* (Chemins d'Interet Commun.) *and Local Roads* (Chemins Vicinaux). —Width between ditches 6m. (20 feet); width of paving 3m. to 4m. (10 to 13 feet). Indicated by a single light red line. On the French maps by two full lines close together.

(5) *Ordinary Roads.*—No account of such roads is given herein. They consists for the most part of farm and forest roads and are indicated on the French 1:50,000 map with single lines or double lines, one of which is dotted.

Lorrain and Rhinish Prussia

Detailed information regarding the roads of Lorraine is not available. The details of the size and importance of roads, as shown on the map, are taken from the Carte Michelin, an automobile map on a scale of 1:200,000. This set of maps is a continuation of the same map in France and in general it can be assumed that roads of similar designation are similar in character to those in France.

Data on road bridges is also lacking, except when they occur over an important stream, canal or railroad. Bridges on roads, where shown on map, are so designated as to position on German maps, but no data is otherwise available.

Certain roads, because of their location between important towns, have been assumed to be of the R.N. type, while others are taken of less importance.

Towns and Villages

The following list comprises all the towns and villages in the quadrangle, the location upon a road or roads, the stream, if any, upon which the town is situated, the population and the number of houses. There are also included the coordinates of the place based upon the French system where possible. The zero of this system lies southwest of France and the coordinates are all plus to the east and north. In this table the easting is given first and the northing is given second.

Name of Town or Village	Road	Stream	Coord. E.	Coord. N.	Pop.	Houses
Altdorf			397	273	176	70
Bambiderstroff			417	257	632	170
Bettlainville	R. N.		395	272	459	126
Bettange	G. C. D.	Nied	409	272	191	47
Bionville	R. N.	Nied A.	409	257	425	119
Bistem im Loch			417	263	300	70
Bouchporn			418	261	392	91
Boulay	R. N.		410	266	2137	422
Burtoncourt			404	270	234	69
Charleville			403	267	282	75
Colligny			397	257	152	42
Conde Northen	R. N.	Nied	405	262	396	108
Coume			415	267	580	147
Courcelles Chaussy	R. N.		403	257	1168	264
Creutzwald		Bist	424	268	1813	334
Dalem			418	272	409	95
Denting			412	267	269	61
Dourdhal			422	256	224	49
Eblange	G. C. D.	Nied	409	270	130	28
Falek			420	270	461	95
Folschwiller			423	253	465	116
Fouligny		Nied A.	410	256	203	47
Gommelange		Nied	408	272	451	127
Guenkirchen			406	268	244	70
Guerting			419	266	440	97
Guinglange		Nied A.	412	254	316	80
Ham sous Varsberg		Bist	421	265	805	164
Hargarten aux Mines			418	270	648	149
Hayes			400	264	213	57
Helstroff			408	262	460	105
Hinckange			406	267	216	59
Haute Vigneulles			414	256	372	100
Laquenexy	G. C. D.		396	254	379	90
Laudrefang			420	254	202	46
Les Etangs	R. N.	Nied F.	401	261	287	82
Longeville les St. Avold	R. N.		420	258	1657	352
Maizeroy			402	255	338	91
Maizery			398	257	53	15
Marange	R. N.		413	258	305	82
Megange			405	270	218	53
Momestroff			413	264	262	61

Name of Town or Village	Road	Stream	Coord. E.	Coord. N.	Pop.	Houses
Narbefontaine			413	261	164	43
Niederwisse			415	264	287	74
Ogy			396	257	143	33
Ottonville			412	270	553	122
Pange		Nied F.	399	255	283	81
Porcelette			421	263	1098	212
Raville		Nied A.	409	256	263	71
Retonfey			396	261	333	97
Roupeldange	G. C. D.	Nied	408	268	231	63
Servigny les Raville			406	254	579	146
Silly sur Nied			400	259	211	70
St. Avold	R. N.		425	257	5648	495
Ste. Barbe			396	263	402	120
Teterchen	R. N.		415	271	628	148
Tritteling	R. N.		419	254	272	67
Valmont			424	254	530	118
Valmunster			411	272	117	28
Varize		Nied A.	407	260	318	82
Varsberg			419	265	497	102
Velving			413	272	237	61
Vigy			395	268	615	176
Villers Bettnach			400	272	196	56
Villers Laquenexy			397	254	164	48
Volmerange	R. N.	Nied	406	264	318	81
Vry			397	267	355	94
Zimming			416	259	226	57

SARREGUEMINES SOUTH WEST

DATA ON BRIDGES

In the following list of bridges, the enumeration has been based upon the idea of designating a bridge in three ways, as follows; (a) as being over an important stream, road, or railroad; (b) as being on a railroad: (c) as being on a highway or road. In this list the bridges on important streams are given first, then follow those upon railroads, and finally those upon roads are given in the order of their importance. This results in a bridge being noted twice and sometimes three times. Where such duplication of record occurs, reference is made to the preceeding item number for the same bridge. Bridges are designated in the list by item numbers. All dimensions are given in meters.

Bridge No	SAME AS BRIDGE No	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD.	SITE OF BRIDGE		DETAILS OF BRIDGE				
				NEAREST TOWN	OVER	PRIN SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
1		Down the Valley of the Nied Francaise	Road Villers Laquenexy to Chanville	Domangeville Mill	Nied Francaise	3				Reinforced Concrete
2		"	Footpath	Pange	"					Timber Footbridge
3		"	Road Pange to Maizeroy	"	Mill Canal		6.0			Metal
4		"	"	"	Nied Francaise	2-6.0				"
5		"	"	"	Channel of Nied Francaise	1-5.5				"
6	88	"	R.R. Courcelles to Saargemund	Chevillon	Nied Francaise	3-10.0				Arranged to be mined Mas. Height 5.5 M
7		"	Road Metz to Saarbrucken	Pont-a-Chaussy	"	1-15.6 2-15.0	52.0	7.8		"
8		"	"	"	Ruisseau	1				"
9		"	Road Silly-sur-Nied to Ladonvillers	"	Nied Francaise					Timber
10		"	Electric power plant bridge	Menils	"					
11		"	Road Etangs to Courcelles-Chaussy	Les Etangs	"	3				Mas.
12		"	"	"	Ruisseau	1-5.0				Metal
13		"	Road Metz to Saarelouis	Pontigny	Nied Francaise	3-12.0	40.8	7.8		Mas.
14		"	Road Northen to Conde-Northen	Conde-Northen	"	1-5.5 2-4.0	14.0	4.0		"

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BRIDGE	SAME AS BRIDGE	ROUTE	DESCRIPTION	SITE OF BRIDGE	DETAILS OF BRIDGE	SARREGUEMINES SW

SARREGUEMINES S.W. BRIDGES #2

BRIDGE No	SAME AS BRIDGE No	ROUTE ROAD, RAILROAD, CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE NEAREST TOWN	SITE OF BRIDGE OVER	DETAILS OF BRIDGE PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
15		Down the valley of the Nied Francoise	Road Northen to Conde-Northen	Conde-Northen	Mill-race		4.0	6.0		Metal
16		"	Footpath Northen to Volmerange.	Junction of two Nieds	Nieds	3-7.0	24.0	1.3		Tim. footbridge on mas. piers.
17		Down the valley of Nied Allemande	Footpath	Mill at Guinglange	Nied Allemande					Footbridge
18		"	Road Guinglange to Bambiderstroff	Guinglange	"	1-4.0 2-				Mas.
19		"	Footpath Guinglange to Pt Helfedange	Petit-Helfedange	"	2-				Metal footbridge on mas.
20		"	Footpath	Between Pt. Helfedange and Fouligny	One channel of Nied A					Timber footbridge
21		"	"	"	"					" "
22		"	Road Raville to Hts-Vignolles	Fouligny	Nied Allemande	1-5.0 4-3.0				Mas.
23		"	Road Raville to Bionville	Raville	" "	2-8.0				Metal on mas.
24		"	"	"	Mill race	2-8.0				" " "
25		"	Road Metz to Sarrebrucken	Bionville	Nied Allemande	1-9.74 2-9.4		7.3		Mas.
26		"	Road Morlange to Bizingen	Morlange	" "	1-5.0 4-3.0				"
27		"	Mill road	Mill of Bizingen	" "					Timber
28		"	Road Bizingen to Courcelles-Chaussy	Bizingen	" "	1-12.0				Metal
29		"	Footpath	Varise	" "					Timber footbridge
30		"	Road Varize to Courcelles-Chaussy	"	" "	2-8.0		4.5		Metal on masonry
31		"	Road Varize to Niederbrucken	"	Ruisseau		4.0			Timber
32		"	Footpath to Mill	"	Nied Allemande		10.0	1.3		Timber footbridge
33		"	Road Varize to Vaudoncourt	"	" "	3-6.5		4.3		Timber on masonry
34		"	Local road to Varize forest	"	" "					
35		"	Footpath	"	" "					Footbridge

BRIDGE	SAME AS BRIDGE	ROUTE	DESCRIPTION	SITE OF BRIDGE	DETAILS OF BRIDGE	SARREGUEMINES S.W.

BRIDGE Nº	SAME AS BRIDGE Nº	ROUTE ROAD, RAILROAD, CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					SARREGUEMINES S.W. BRIDGES # 3
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES	
36		Down the valley of Nied Allemande	Road Varize to Niedbrucken	Steidbrucker Mill	Nied Allemande	1-6.5 2-3.5		4.3		Masonry	
37		"	Road Conde-Northan to Loutremange	Loutremange	" "	1-13.0 2-4.5		4.0		Center span metal, others mas.	
38	96	"	R.R. Courcelles to Saargemund	"	" "	1-12 2-4				Metal on masonry. Ht. 5M.	
39		"	Road Metz to Sarrelouis	"	" "	1-6 2-4.5		8.0		Mas.	
40		"	"	"	Flood channel of Nied A.	2-6.5		6.0		Metal on mas.	
41		Down the Valley of Nied	Road Volmerange to Hinckange	Volmerange	Nied	1-3.5 2-2.3	20.0	3.5		Mas. (Bad condition)	
42		"	"	"	"	2-8.0		5.0		Metal on masonry	
43		"	Road Boulay to Metz	Brecklange	"	4-6.0	30.0	6.0		Masonry	
44		"	"	"	"					Old bridge	
45		"	Local road	"	Rau Grossbach						
46		"	Road Boulay to Rockange	Roupeldange	Nied	2-10.0 2-3.0	42.0	4.2		Mas.	
47		"	Footpath	Flass-Garten Mill	" and over dam		17.0	1.5		Timber footbridge	
48		"	"	Guirlange	Nied		17.0	1.5		" "	
49		"	Road Boulay to Eblange	Eblange	Rau Schwelbach					Metal	
50		"	Road Bettange to Guirlange	Bettange	Nied		25.0	4.0		Timber deck and piles Mas. abuts	
51		"	Road Metz to Teterchen	Gommelange	"	2-9.0	20.0	4.75		Metal on masonry	
52		R.R. Metz to Dillingen	Two Tracks	Vigy	R.R. under a local road					Metal	
53		"	"	"	R.R. under road Vigy to Bettsdorf						
54		"	"	"	R.R. over a local road to forest Pieds						
55		"	"	"	R.R. under a forest road.					Metal	
56		"	"	"	R.R. under local road					"	

BRIDGE	SAME AS BRIDGE	ROUTE	DESCRIPTION	SITE OF BRIDGE	DETAILS OF BRIDGE	SARREGUEMINES S.W.

SARREGUEMINES S.W. BRIDGES # 4

BRIDGE No	SAME AS BRIDGE No	ROUTE Road, Railroad Canal or River	DESCRIPTION OF ROAD	SITE OF BRIDGE NEAREST TOWN	SITE OF BRIDGE OVER	DETAILS OF BRIDGE PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
57		R.R. Metz to Dillingen	Two Tracks	Vigy	R.R. over Rau					Culvert
58		"	"	"	R.R. over local road					
59		"	"	"	R.R. under road Bettsdorf to St. Hubert					Metal
60		"	"	Bettsdorf	R.R. over Rau					Culvert
61		"	"	"	R.R. over road Altdorf to St. Hubert	1-4.8	6.8			Metal on mas Two Single track bridges
62		"	"	"	R.R. over road St. Hubert to Altdorf forest					
63		"	"	"	R.R. over Rau Canner and two local roads	9-22.0 8-8.0 2-16.0	294.0			Max. height 20.95 M. Pedestals, end spans & abuts. masonry. Metal girders-towers concrete.
64		"	"	"	R.R. over Rau Villers	6-22.0 5-8.0 2-16.0	204.0			Max. height 18.97 M. Metal girders and towers, concrete peds., End spans and abuts. masonry
65		"	"	"	R.R. under road Villers-Bettnach to St. Bernard					
66		"	"	St. Hubert	R.R. under local road					Metal
67		"	"	"	R.R. over Rau					Culvert
68		"	"	"	" " "					"
69	115	R.R. Thionville to Volklingen	Four Tracks	Tetarchen	R.R. over road Tetarchen to Hargarten	1-6.0				Mas. Height 6.5 M.
70	116	"	"	"	R.R. over road Hargarten to Coume	1-4.0				Mas.
71	117	"	"	"	R.R. over road Hargarten to St. Victor farm	1-3.5				Mas.
72	118	"	"	"	R.R. over Rau Hellenmühle					Culvert.
73	119	"	"	"	R.R. under road near Hargarten Statie.	1				Metal
74		"	Two Tracks	Hargarten	R.R. over road Hargarten to Creutzwald	1-8.0				"
75		"	"	"	R.R. under R.R. connection with Courcelles to Saargemund line.					
76		"	"	"	R.R. under road Blauer-Kreuz-Weg.					
77		"	"	"	R.R. over Rau Glockenhoferbach	1				Mas.

	SAME AS	ROUTE DESCRIPTION	SITE OF BRIDGE	DETAILS OF BRIDGE	SARREGUEMINES S.W.

BRIDGE Nº	SAME AS BRIDGE Nº	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE					SARREGUEMINES S.W. BRIDGES * 5
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH of ROADWAY	NOTES	
78		R.R. Thionville to Volklingen	Two Tracks	Hargarten	R.R. over road Bidlingen to Glockenhof farm	1				Masonry	
79		"	"	"	R.R. over Rau Alte Bist						
80		"	"	"	R.R. over Rau Muhlenbach						
81		"	"	"	R.R. under road Uberherrn to Creutzwald						
82		R.R. Courcelles to Saargemund	"	Pange	R.R. over Rau					Culvert	
83		"	"	"	R.R. over local road	1				Masonry	
84		"	"	"	R.R. over Rau Tiech Bach	1				Metal Culvert	
85		"	"	"	R.R. under road Pange to Mont	1-17.0		5.0		Metal. Height 7M.	
86		"	"	"	R.R. under local road						
87		"	"	"	R.R. over Channel of Nied F.						
88	6	"	"	"	R.R. over Nied Francaise	3-10.0				Masonry. Height 5.5M.	
89		"	"	"	R.R. over local road near the Nied	1-4.0				"	
90		"	"	Courcelles-Chaussy (Kurzel)	R.R. over Rau Kurzel	1-7.0				"	
91		"	"	"	R.R. over Rau					Culvert	
92		"	"	Ladonvillers	R.R. over road Landonvillers to the Nied						
93		"	"	"	"						
94		"	"	"	R.R. over Rau					Culvert	
95		"	"	"	"					"	
96	38	"	"	Conde-Northen (Contchen)	R.R. over Nied Allemande	1-12.0 2-4.0				Metal on mas. Height 5M.	
97		"	"	"	R.R. over local road						
98		"	"	"	R.R. under road Volmerange to Helstroff	1-8.0	20.0			Metal on masonry	

BRIDGE No.	SAME AS BRIDGE No.	ROUTE No.	DESCRIPTION	SITE OF BRIDGE	DETAILS OF BRIDGE	NOTES	SARREGUEMINES S.W.

BRIDGE Nº	SAME AS BRIDGE Nº	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				NOTES
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH of ROADWAY	
99		R.R. Courcelles to Saargemund	Two Tracks	Volmerange	R.R. over channel of Rau Doretzel	1				Metal Culvert
100		"	"	"	"	1				" "
101		"	"	"	R.R. under local road					
102		"	"	"	R.R. over local road Macker to Brecklange					
103		"	"	"	R.R. over Rau					Culvert
104		"	"	"	"					"
105		"	"	"	R.R. over local road					
106		"	"	"	R.R. over Rau Kaltbach	1				Mas.
107		"	"	Boulay (Bolchen)	R.R. over Rau Muhlenbach	2-5.0				Metal
108		"	"	"	R.R. under road Boulay to Teterchen	2				Masonry skew
109		"	"	"	R.R. over Rau Muhlenbach	1				Metal
110		"	"	"	"	1				"
111		"	"	"	R.R. over road Boulay to Denting					
112		"	"	Denting	R.R. under road Denting to Othonville	1-10.0	25.0	5.0		Mas.
113		"	"	"	R.R. under local road					
114		"	"	"	R.R. over a ravine					Culvert
115	69	"	Four Tracks	Teterchen	R.R. over road Teterchen to Hargarten	1-6.0				Mas. Height 6.5 M.
116	70	"	"	"	R.R. over road Hargarten to Coume	1-4.0				"
117	71	"	"	"	R.R. over road Hargarten to St. Victor farm	1-3.5				"
118	72	"	"	"	R.R. over Rau Heilenmuhle					Culvert.
119	73	"	"	"	R.R. under road near Hargarten station	1				Metal.

SARREGUEMINES S.W.
BRIDGES # 6

BRIDGE	SAME AS BRIDGE	ROUTE ROAD, RAILROAD	DESCRIPTION OF	SITE OF BRIDGE		DETAILS OF BRIDGE			SARREGUEMINES S.W.
						PRIN.	TOTAL	WIDTH	WIDTH OF

SARREGUEMINES S.W.
BRIDGES #7

BRIDGE Nº	SAME AS BRIDGE Nº	ROUTE ROAD, RAILROAD CANAL OR RIVER	DESCRIPTION OF ROAD	SITE OF BRIDGE		DETAILS OF BRIDGE				
				NEAREST TOWN	OVER	PRIN. SPANS	TOTAL LENGTH	WIDTH OVERALL	WIDTH OF ROADWAY	NOTES
120		R.R. Courcelles to Saargemond	Two Tracks	Hargarten	R.R. over road Hargarten to Creutzwald	1-8.0				Metal
121		"	"	"	R.R. under local road Hayinger Weg.	1				Masonry
122		"	"	"	R.R. over Rau Liebsbach	1				"
123		"	"	"	R.R. over local road					
124		"	"	Creutzwald	R.R. over road Creutzwald to Ham					
125		"	"	"	R.R. over Rau Bist					
126		"	"	"	R.R. over valley of Rau Diesen					
127		"	"	"	R.R. over local road					
128		"	"	"	R.R. under local road Diesen to Creutzwald					
129		"	"	"	R.R. under local road					
130		"	"	Carling	R.R. over road Carling to Lauterbach	1-5.0				Masonry. Height 6.0M.
131		"	"	"	RR. over Rau Lauterbach	1-3.0				Mas. Culvert
132		"	"	"	R.R. over local road					
133		"	"	"	R.R. under road Carling to Spittel	1-20.0	30.0	6.0		Mas.
134		"	"	"	R.R. under road to Metz	1-20.0	30.0			"
135		R.R. Metz to Saarbrocken	"	Folschwiller	R.R. over local road					
136		"	"	"	R.R. over Rau					Culvert
137		"	"	"	R.R. over road Valmont to Altweiler					

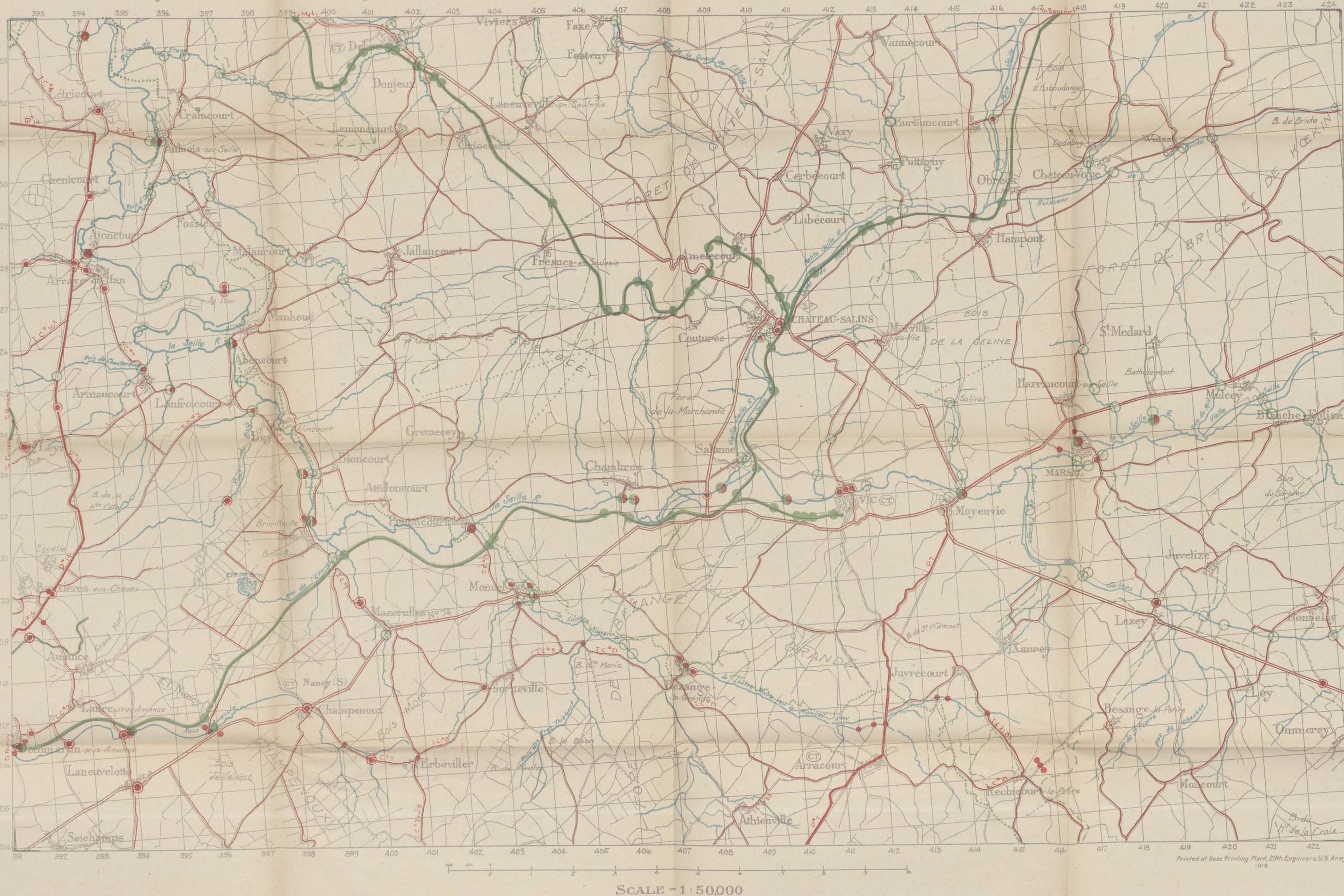
G.H.Q. A.E.F.
G-2 GENERAL STAFF
A-3

ROAD AND BRIDGE MAP
SARREBOURG SOUTH-WEST

SARREBOURG S.O.

R.N. National Roads
G.C. or G.C.D. or D. Important Departmental Roads
I.C. Communal or County Roads
Double Track Standard Gage Railroad
Single Track Standard Gage Railroad
Single Track Narrow Gage Railroad
New Double Track Standard Gage Railroad
New Single Track Standard Gage Railroad
New Single Track Narrow Gage Railroad
New Single Track Narrow Gage Railroad by Information

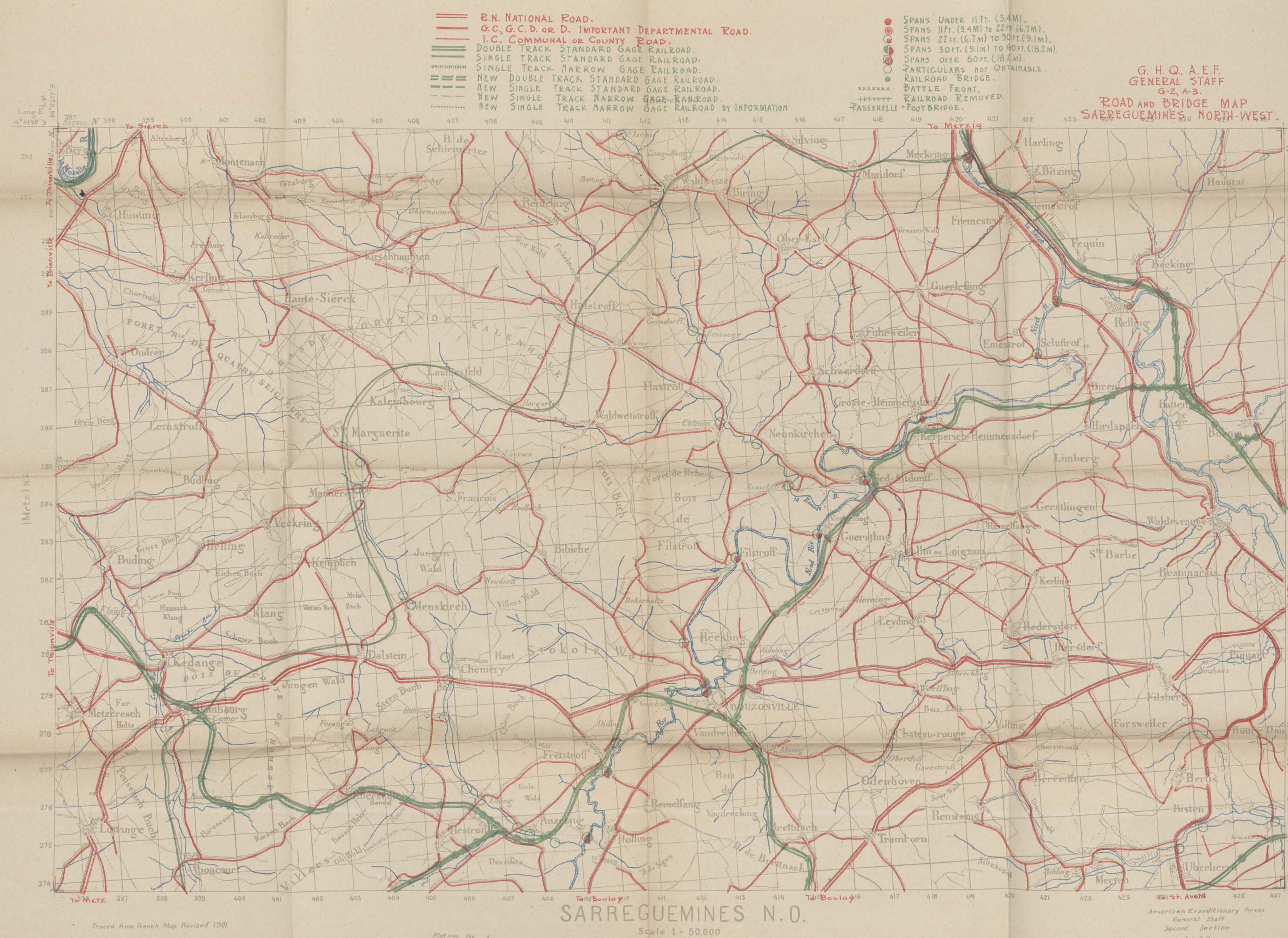
Spans under 11 ft. (3.4 M)
Spans 11 ft. (3.4 M) to 22 ft. (6.7 M)
Spans 22 ft. (6.7 M) to 30 ft. (9.1 M)
Spans 30 ft. (9.1 M) to 60 ft. (18.2 M)
Spans over 60 ft. (18.2 M)
Particulars not obtainable
Railroad bridges
Railroad removed
Battle Front, Jun 1, 1918
Passerelle-Footbridge



SCALE = 1:50,000

Printed at Base Printing Plant, 29th Engineers U.S. Army
1918

SARREBOURG S.W
Tracing of Green Line for Railroads.



R.N. NATIONAL ROAD.
G.C., G.C.D. OR D. IMPORTANT DEPARTMENTAL ROAD.
I.C. COMMUNAL OR COUNTY ROAD.
DOUBLE TRACK STANDARD GAGE RAILROAD.
SINGLE TRACK STANDARD GAGE RAILROAD.
SINGLE TRACK NARROW GAGE RAILROAD.
NEW DOUBLE TRACK STANDARD GAGE RAILROAD.
NEW SINGLE TRACK STANDARD GAGE RAILROAD.
NEW SINGLE TRACK NARROW GAGE RAILROAD.
NEW SINGLE TRACK NARROW GAGE RAILROAD BY INFORMATION.
SPANS UNDER 11 FT. (3.4M).
SPANS 11 FT. (3.4M) TO 22 FT. (6.7M).
SPANS 22 FT. (6.7M) TO 30 FT. (9.1M).
SPANS 30 FT. (9.1M) TO 60 FT. (18.2M).
SPANS OVER 60 FT. (18.2M).
PARTICULARS NOT OBTAINABLE.
RAILROAD BRIDGE.
BATTLE FRONT.
RAILROAD REMOVED.
PASSERELLE = FOOT BRIDGE.
G. H. Q. A. E. F.
GENERAL STAFF
G-2, A-3.
ROAD AND BRIDGE MAP
SARREGUEMINES NORTH-WEST.
To Sierck
To Merzig
To Thionville
To Saarlouis
To Metz
To Boulay
To Boulay
To St. Avold
(Metz) N.E.
Sarreguemines N.E.
Altenberg
Montenach
Hunting
Kerling
Haute-Sierck
Oudren
Lemstroff
Budling
Veckring
Helling
Buding
Klang
Kedange
Metzeresch
Luttange
Sierck
FORET R.le DES QUATRE SEIGNEURS
FORET DE KALENHOVEN
Kalembourg
Ste Marguerite
Monneren
Kemplich
Menskirch
Dalstein
Chemery
Stokolz Wald
Jungen Wald
BOIS DU COTE DE HOMBOURG
B. de Schirmerter
Remeling
Halstroff
Laumesfeld
Waldweistroff
Flastroff
St Francois
Bibiche
Filstroff
Hestroff
Anzeling
Holling
Freistroff
Reimelfang
Vaudreching
BOUZONVILLE
Heckling
Brettnach
Waldwisse
Biring
Silving
Mondorf
Meckring
Ober-Esch
Guerlefang
Fuhrweiler
Schwerdorff
Grosse-Hemmersdorf
Neunkirchen
Kerperich-Hemmersdorf
Nied-Altdorff
Guerstling
Ihn ou Loignon
Leyding
Chateau-rouge
Odenhoven
Remering
Tromborn
Harling
Bitzing
Haustat
Fremestrof
Fequin
Becking
Relling
Emestrof
Sclufrof
Biren
Hirdspach
Limberg
Gerstlingen
Waldevrange
Ste Barbe
Kerling
Beaumarais
Bedersdorf
Itersdorf
Piquart
Filsberg
Forsweiler
Bourg Dau
Villing
Berveiller
Berus
Bisten
Uberherrn
Merten
Nied R.
SARREGUEMINES N.O.
Scale 1 = 50,000
Traced from French Map Revised 1901
American Expeditionary Forces
General Staff
Second Section
Int. A. 3.
Printed at Base Printing Plant, 29th Engineers, U.S. Army
1918

R.N. NATIONAL ROAD
G.C., G.C.D. OR D. IMPORTANT DEPARTMENTAL ROAD
I.C. COMMUNAL OR COUNTY ROAD

DOUBLE TRACK STANDARD GAGE RAILROAD.
SINGLE TRACK STANDARD GAGE RAILROAD.
SINGLE TRACK NARROW GAGE RAILROAD.
NEW DOUBLE TRACK STANDARD GAGE RAILROAD.
NEW SINGLE TRACK STANDARD GAGE RAILROAD.
NEW SINGLE TRACK NARROW GAGE RAILROAD.
NEW SINGLE TRACK NARROW GAGE RAILROAD BY INFORMATION.

SPANS UNDER 11 FT. (3.4M).
SPANS 11 FT. (3.4M) TO 22 FT. (6.7M).
SPANS 22 FT. (6.7M) TO 30 FT. (9.1M).
SPANS 30 FT. (9.1M) TO 60 FT. (18.2M).
SPANS OVER 60 FT. (18.2M).
PARTICULARS NOT OBTAINABLE.
RAILROAD BRIDGE.
RAILROAD REMOVED
BATTLE FRONT
PASSERELLE = FOOT BRIDGE.

G. H. Q., A. E. F.
G-2 GENERAL STAFF.
A-3.
ROAD AND BRIDGE MAP.
SARREGUEMINES SOUTH WEST

SARREGUEMINES S.O.

Traced from French Map Revised 1901

American Expeditionary Forces
General Staff
Second Section
Int A. 3

Printed at Base Printing Plant 28th Engineers, U.S. Army
1918

METZ

R.N.2 National Roads
G.C. or G.C.D. Important Departmental Roads
I.C. Communal or County Roads
Double Track Standard Gage Railroad
Single Track Standard Gage Railroad
Single Track Narrow Gage Railroad
New Double Track Standard Gage Railroad
New Single Track Standard Gage Railroad
New Single Track Narrow Gage Railroad
New Single Track Narrow Gage Railroad By Information

Spans under 11 ft (3.4M)
Spans 11 ft (3.4M) to 22 ft (6.7M)
Spans 22 ft (6.7M) to 30 ft (9.1M)
Spans 30 ft (9.1M) to 60 ft (18.2M)
Spans over 60 ft (18.2M)
Particulars not obtainable
Railroad bridges
Passerelle: Foot Bridge
Railroad Removed
Battle Front

G.H.Q. - A.E.F.
G-2 GENERAL STAFF
A-3
ROAD AND BRIDGE MAP
METZ-NORTH-EAST

Met. 1000 800 0
0 1 2 3 4 5 6 7 8 9 10 Kilom.

SCALE = 1: 50,000