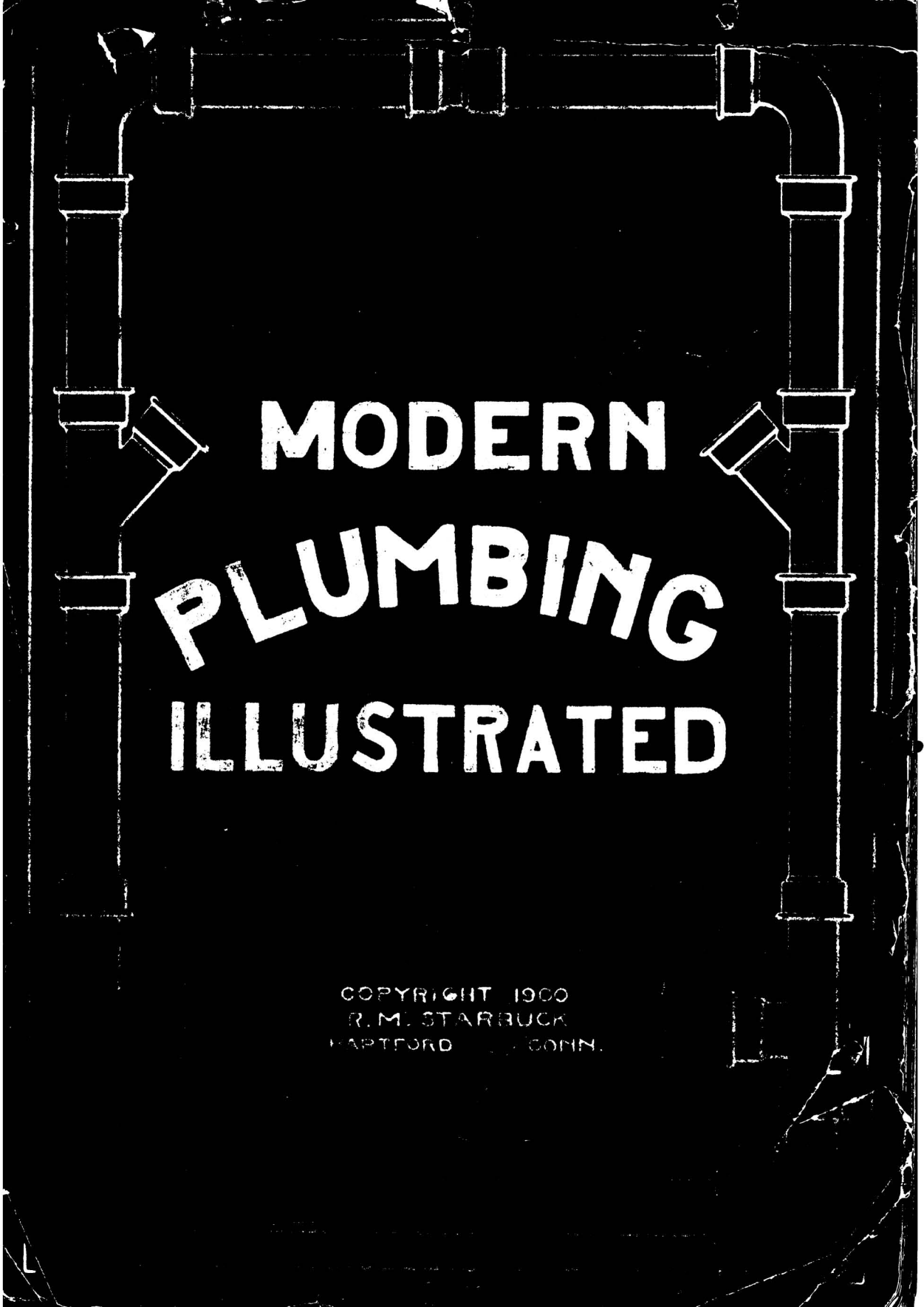


COPYRIGHT 1900
R. M. STARBUCK
HARTFORD CONN.

PLATE I.

CONNECTIONS FOR LAVATORY

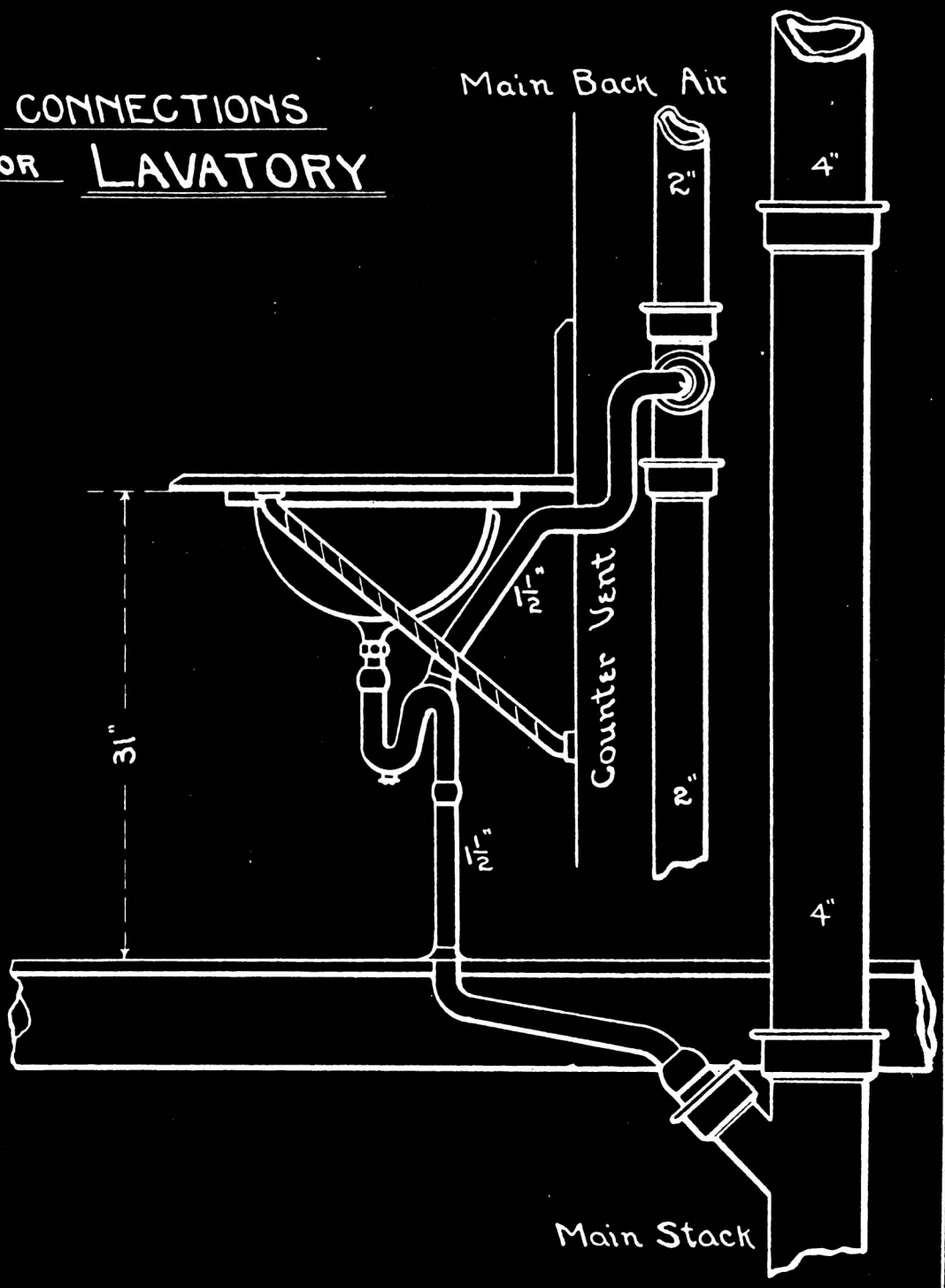
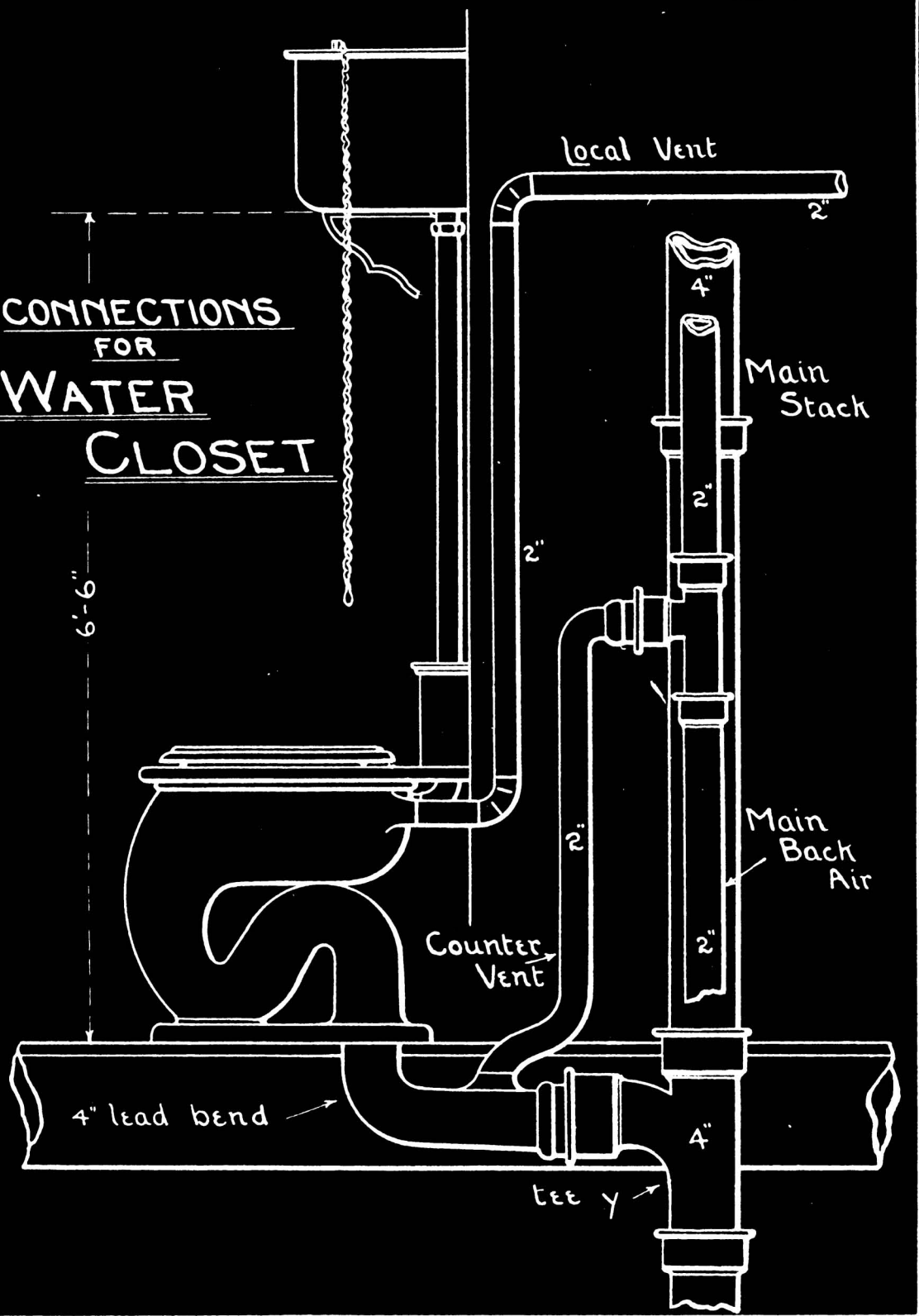


PLATE 2.

CONNECTIONS FOR WATER CLOSET



CONNECTIONS FOR BATH TUB

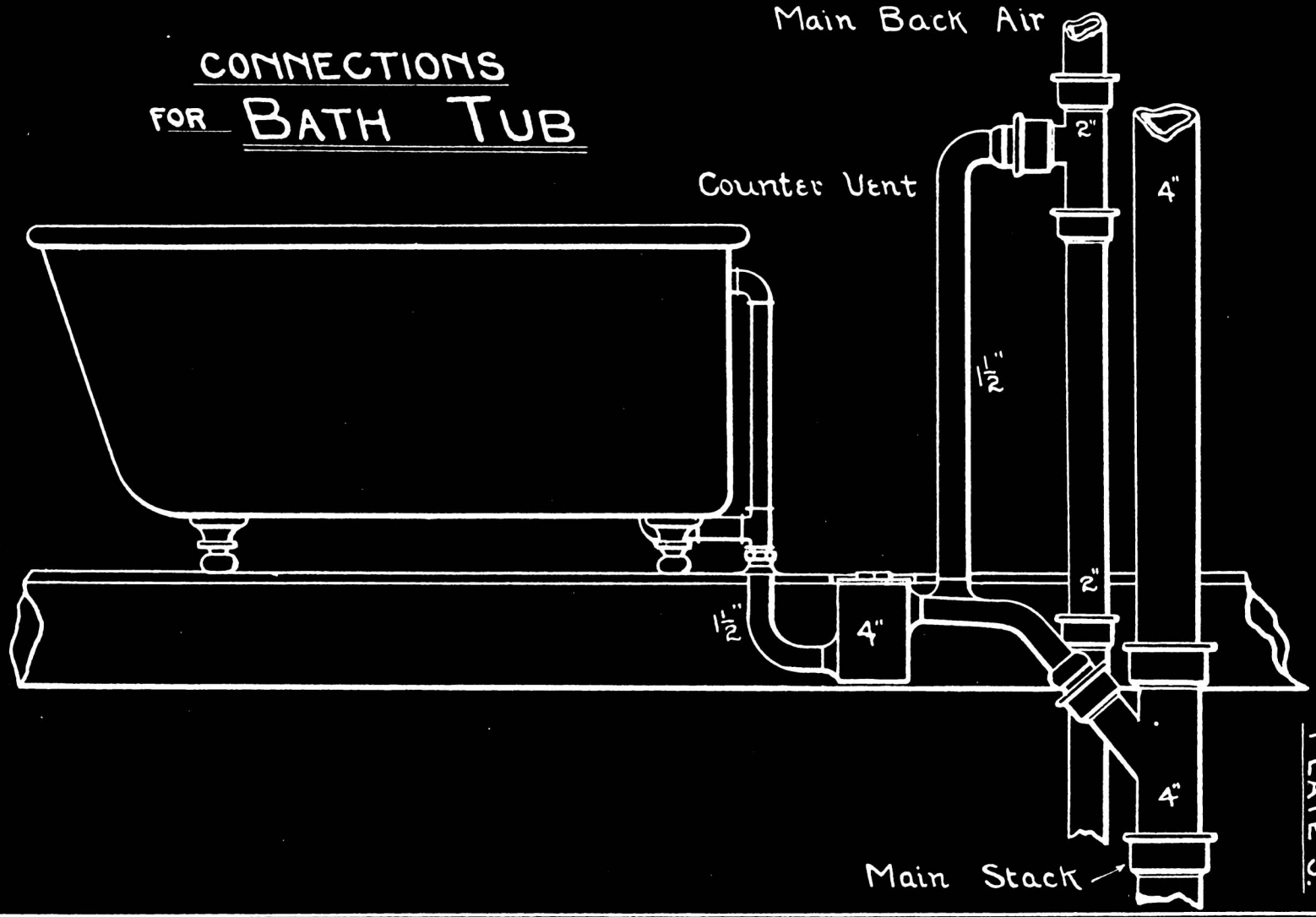
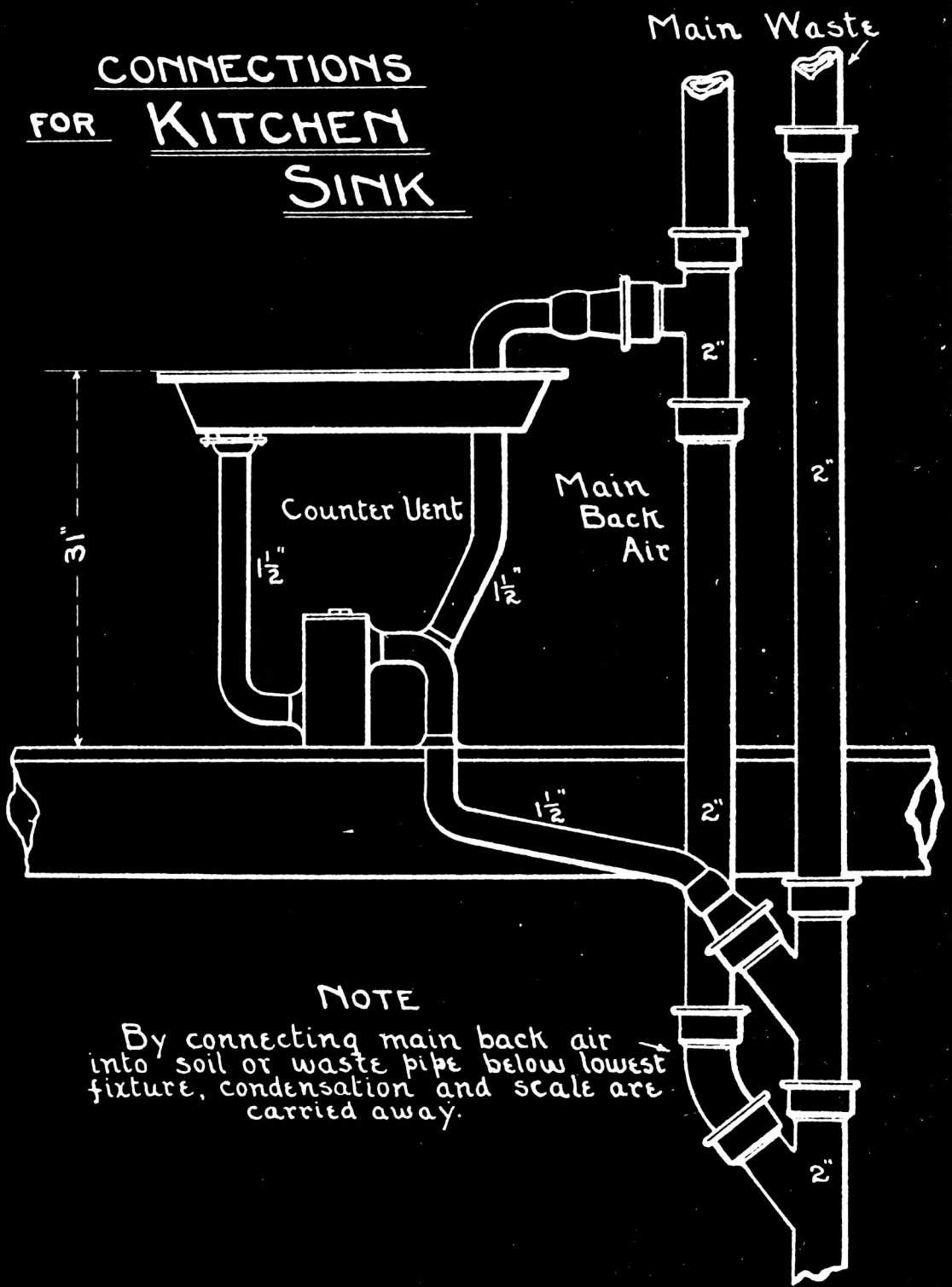


PLATE 3.

PLATE 4.

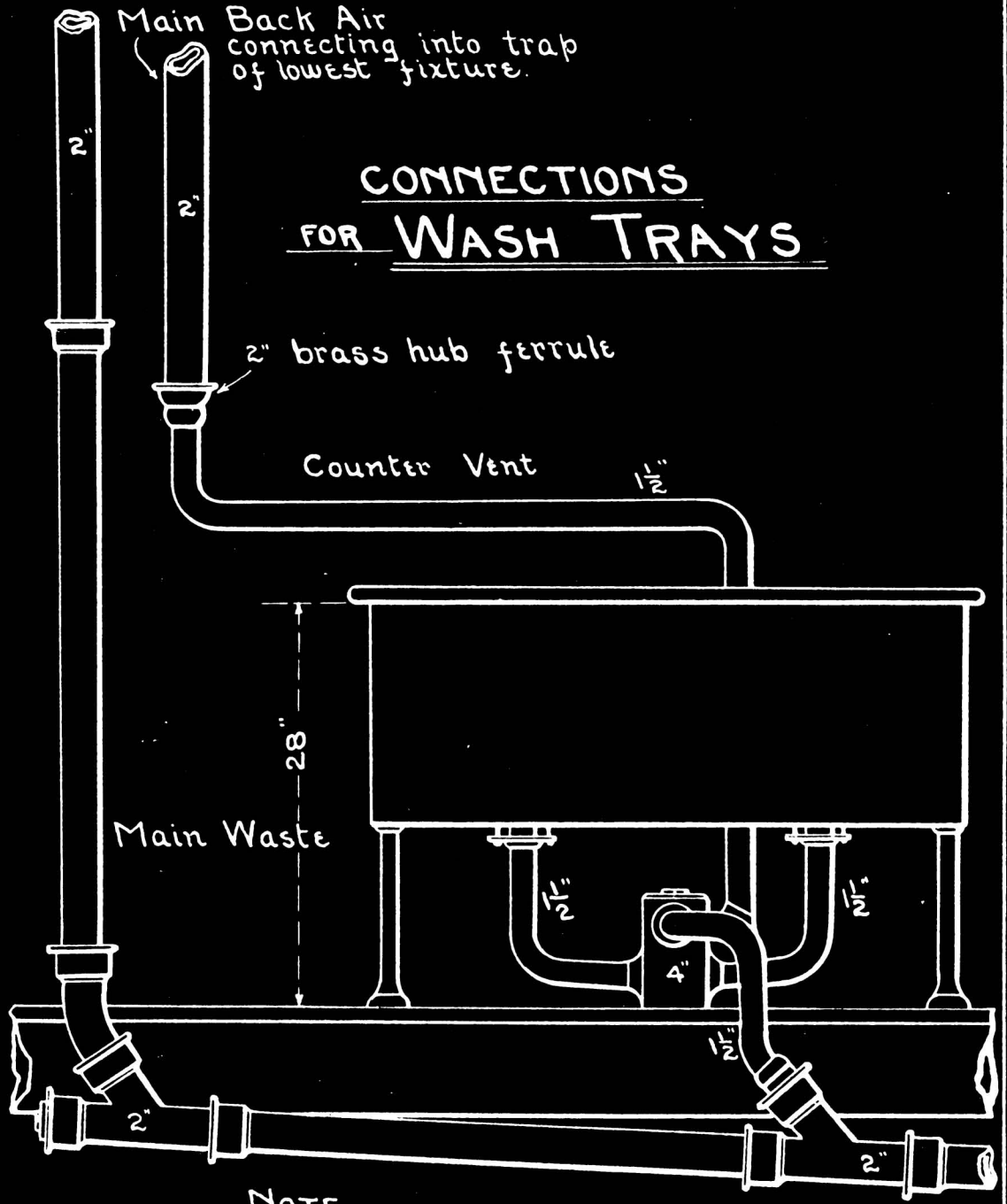
CONNECTIONS FOR KITCHEN SINK



NOTE

By connecting main back air into soil or waste pipe below lowest fixture, condensation and scale are carried away.

PLATE 5.



CONNECTIONS FOR WASH TRAYS

NOTE

Better practice to enter main back air into main waste, though method shown is sanitary.

PLATE 6.

CONNECTIONS FOR PANTRY SINK

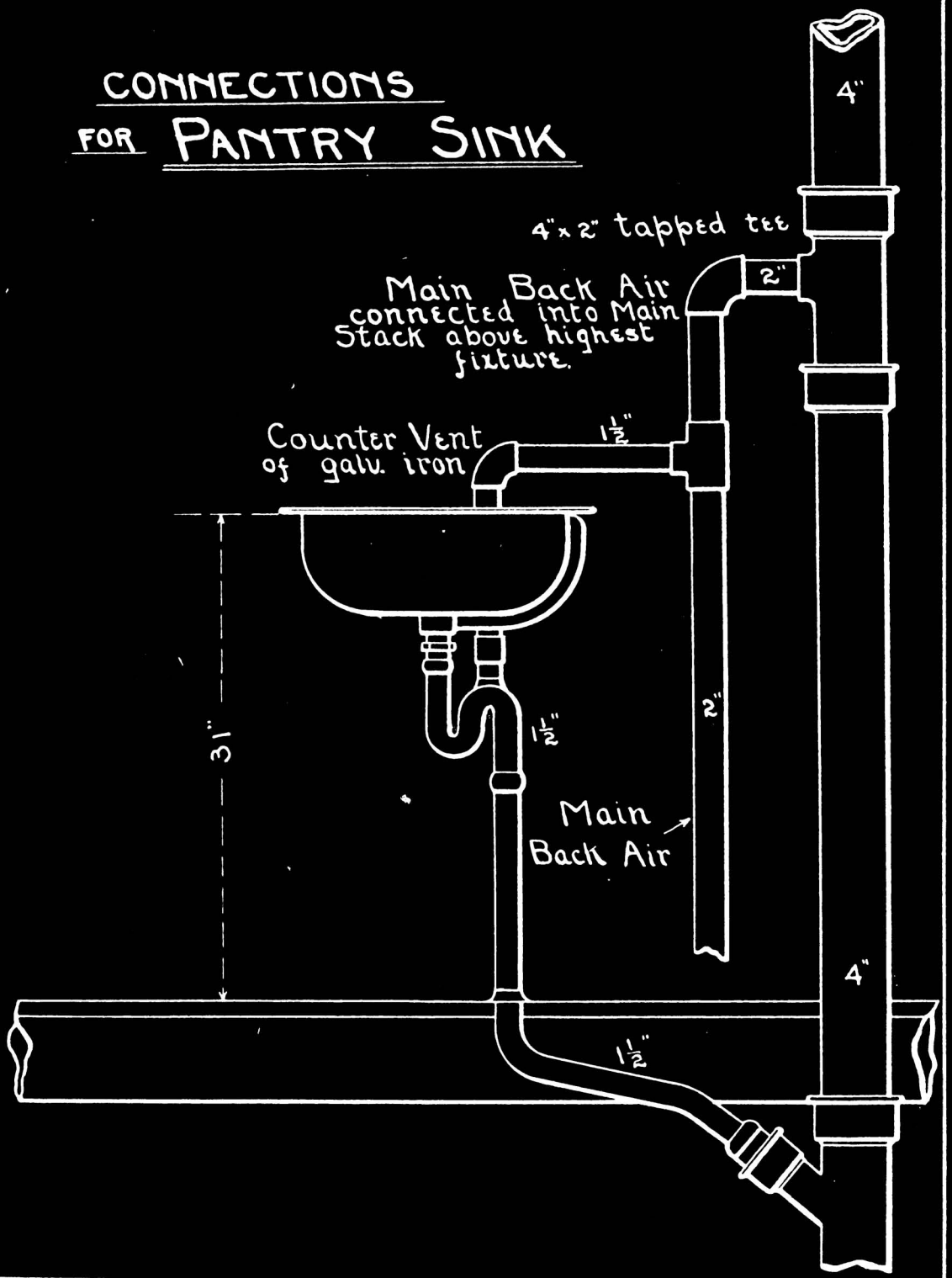


PLATE 7.

CONNECTIONS FOR URINAL

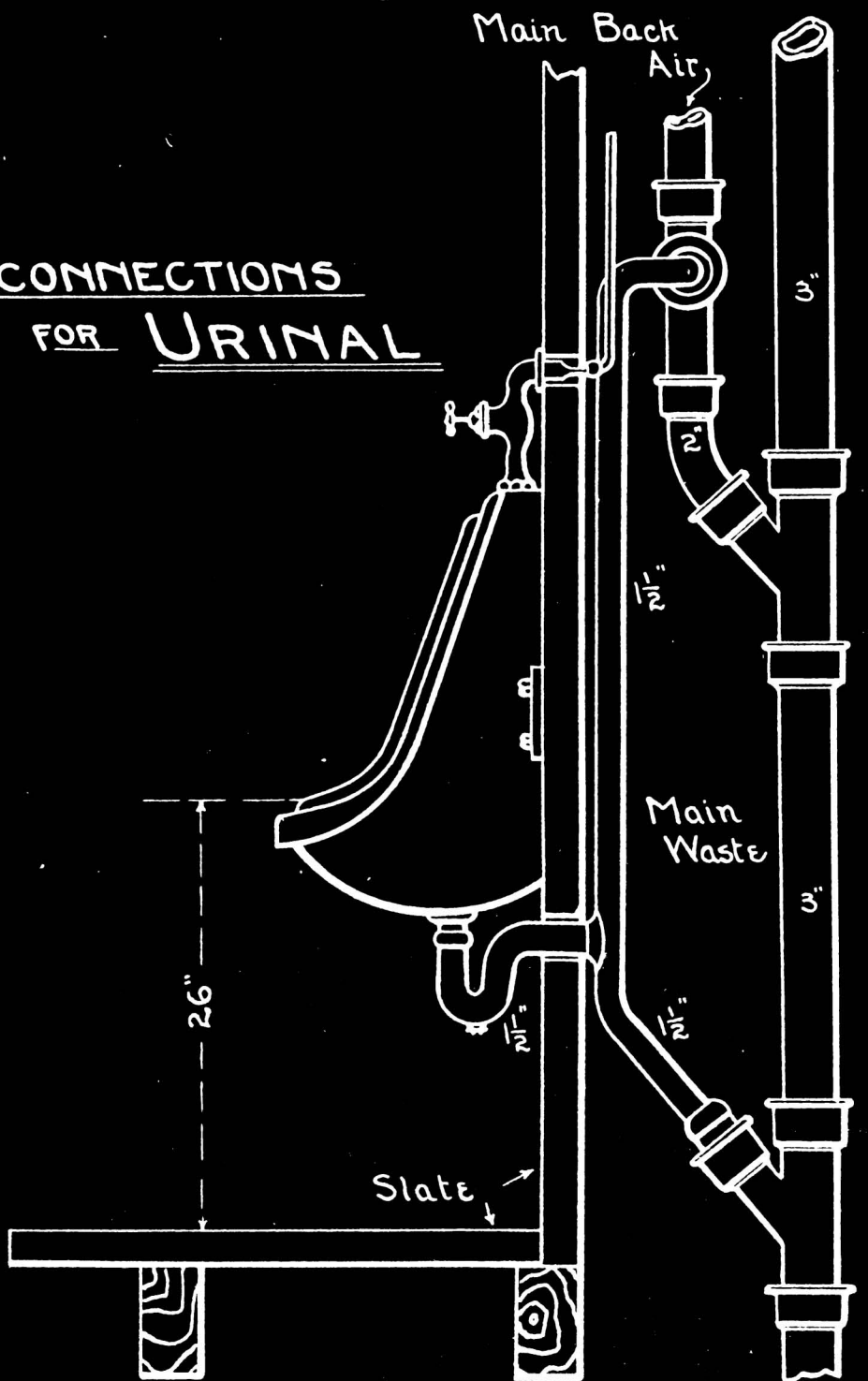
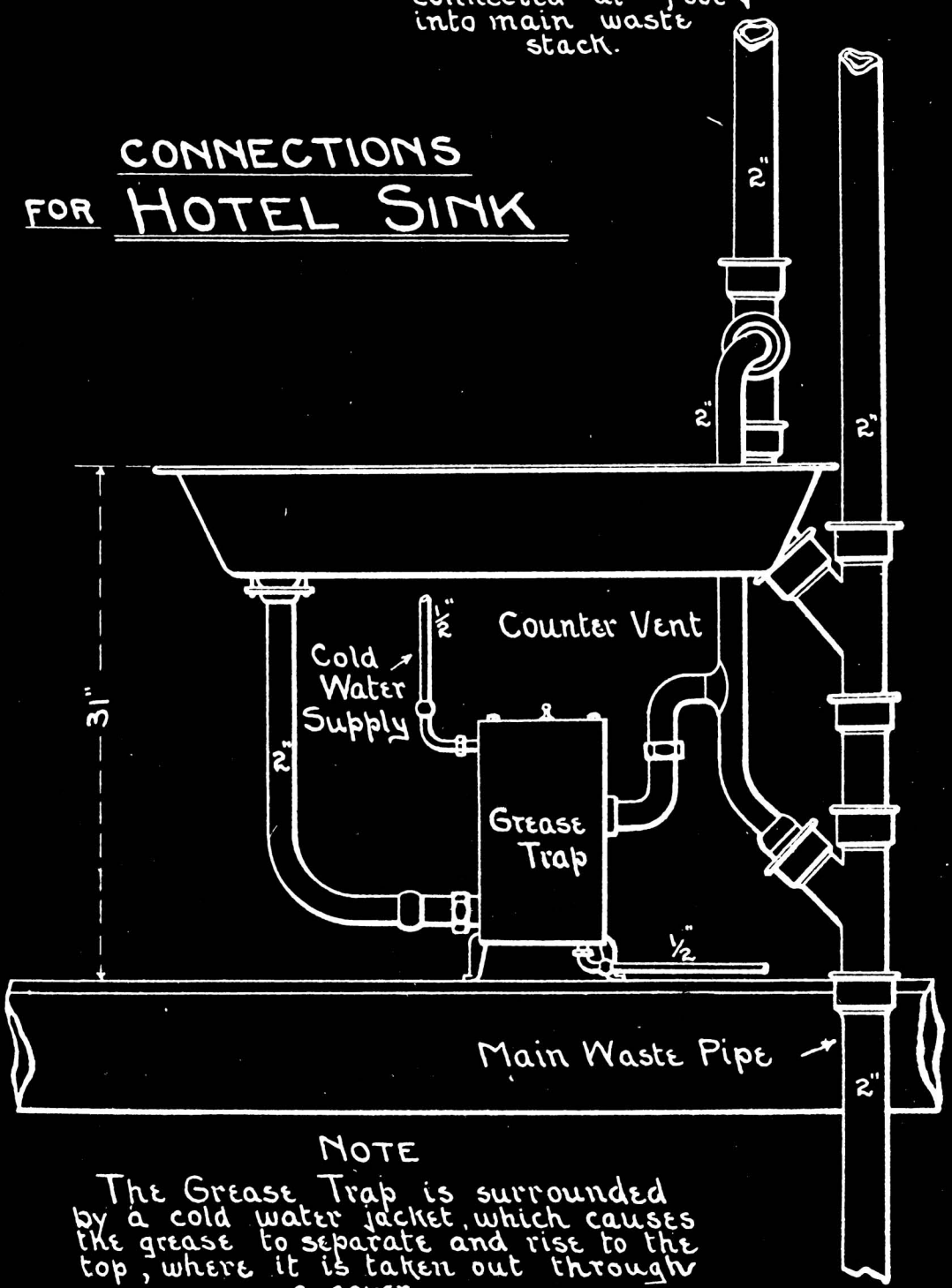


PLATE 8.

CONNECTIONS FOR HOTEL SINK



NOTE

The Grease Trap is surrounded by a cold water jacket, which causes the grease to separate and rise to the top, where it is taken out through a cover.

PLATE 9.

CONNECTIONS FOR FOOT BATH AND SITZ BATH

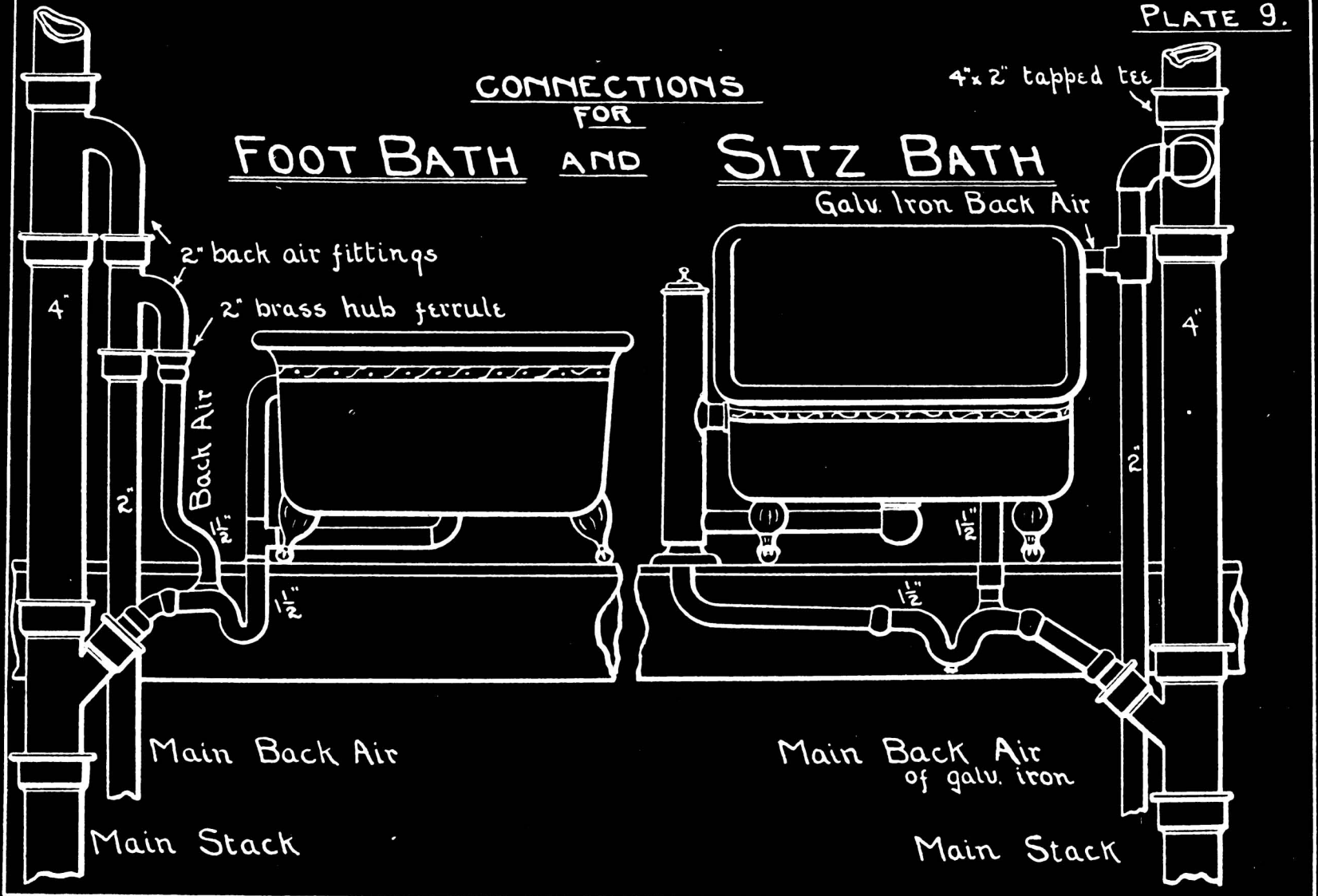


PLATE 10

CONNECTIONS FOR SLOP HOPPERS

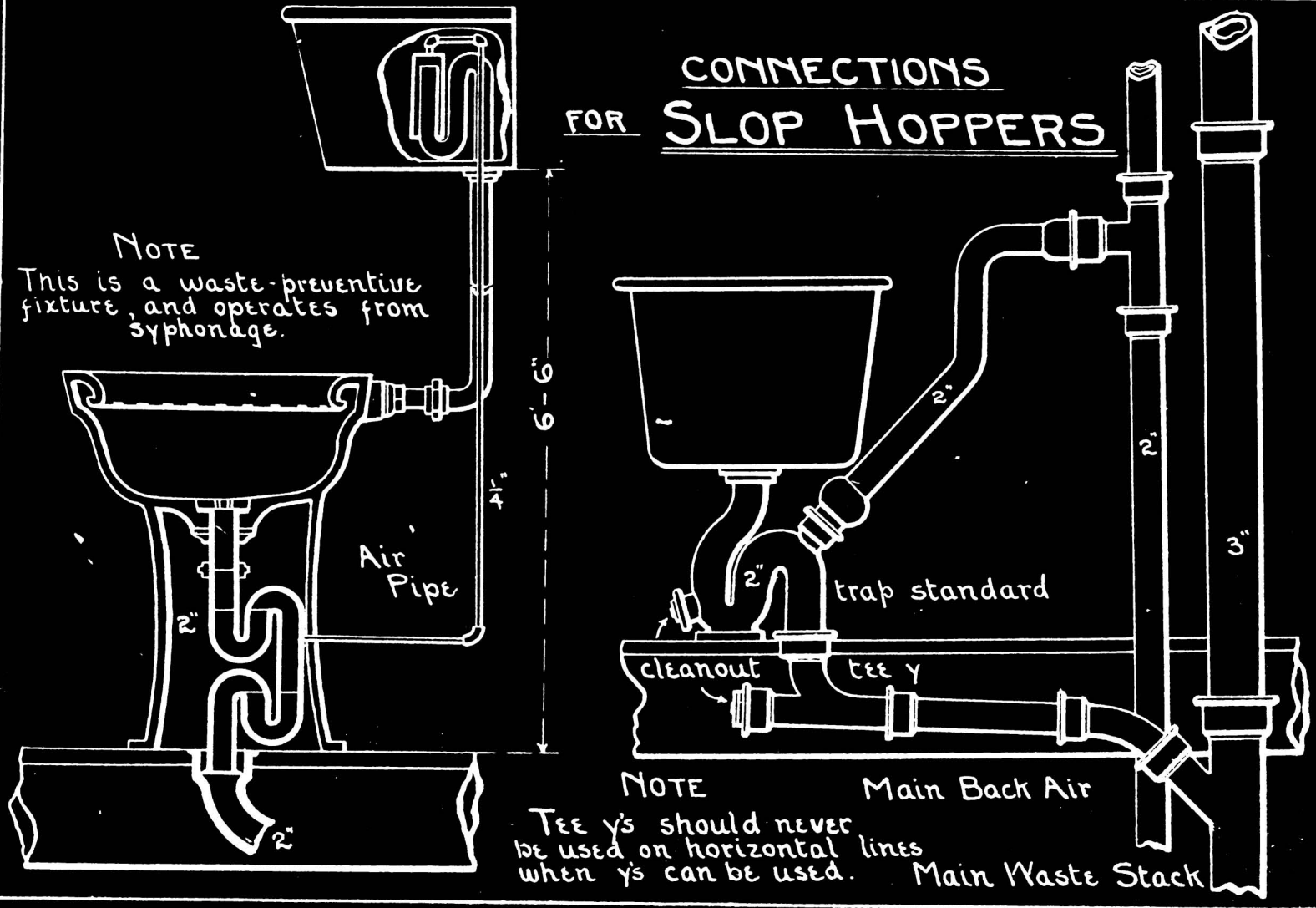


PLATE II.

CONNECTIONS FOR REFRIGERATOR

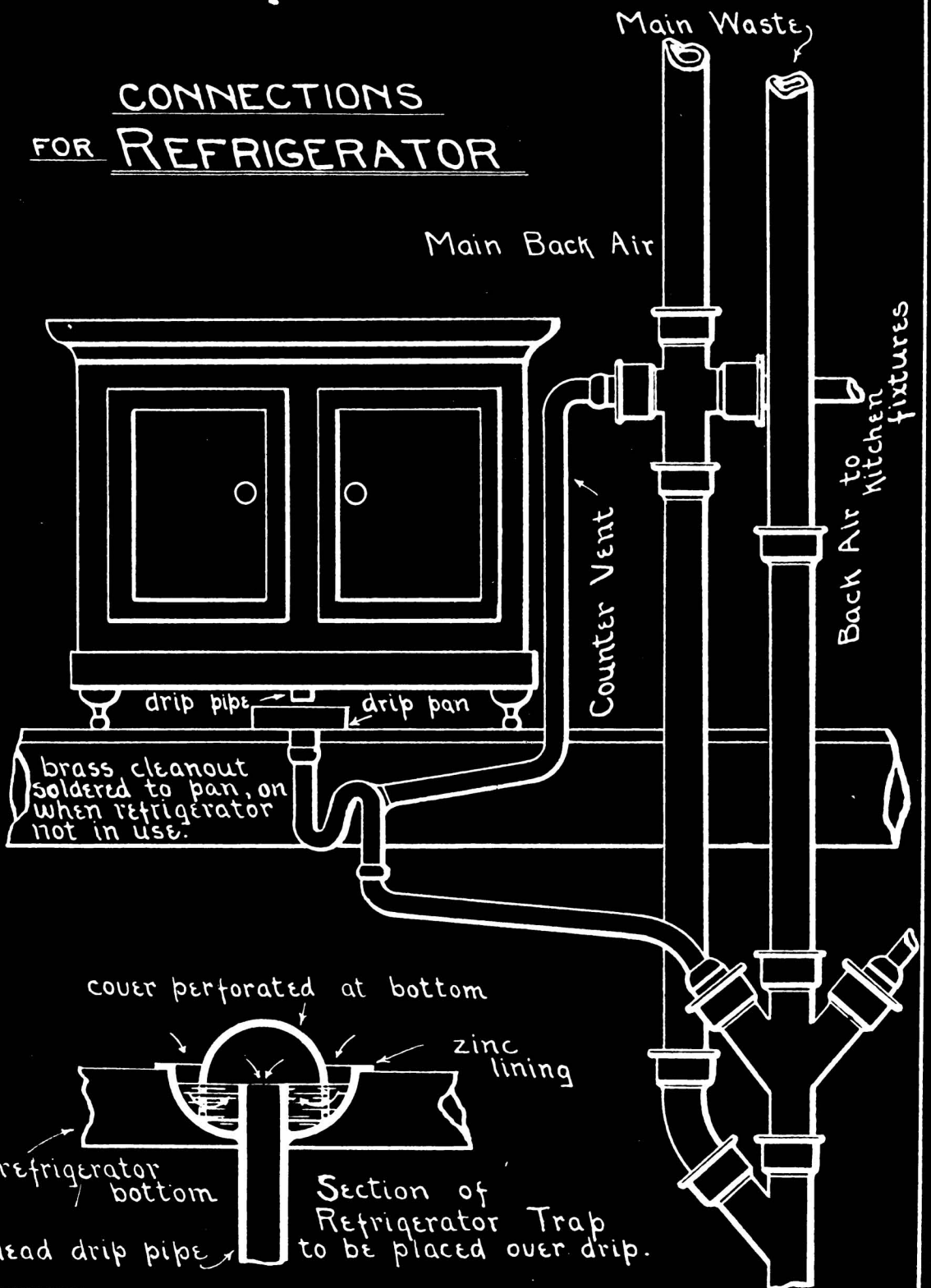
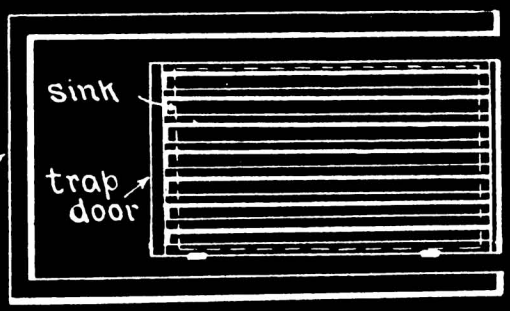


PLATE 12.



NOTE

Sketch shows position of sink and trap door relative to stall.

stall (end view)

CONNECTIONS FOR HORSE STALL

Planks forming trap door run lengthwise of stall, with space between them for escape of refuse into sink.

Perforated cover to prevent escape of solid matter into waste

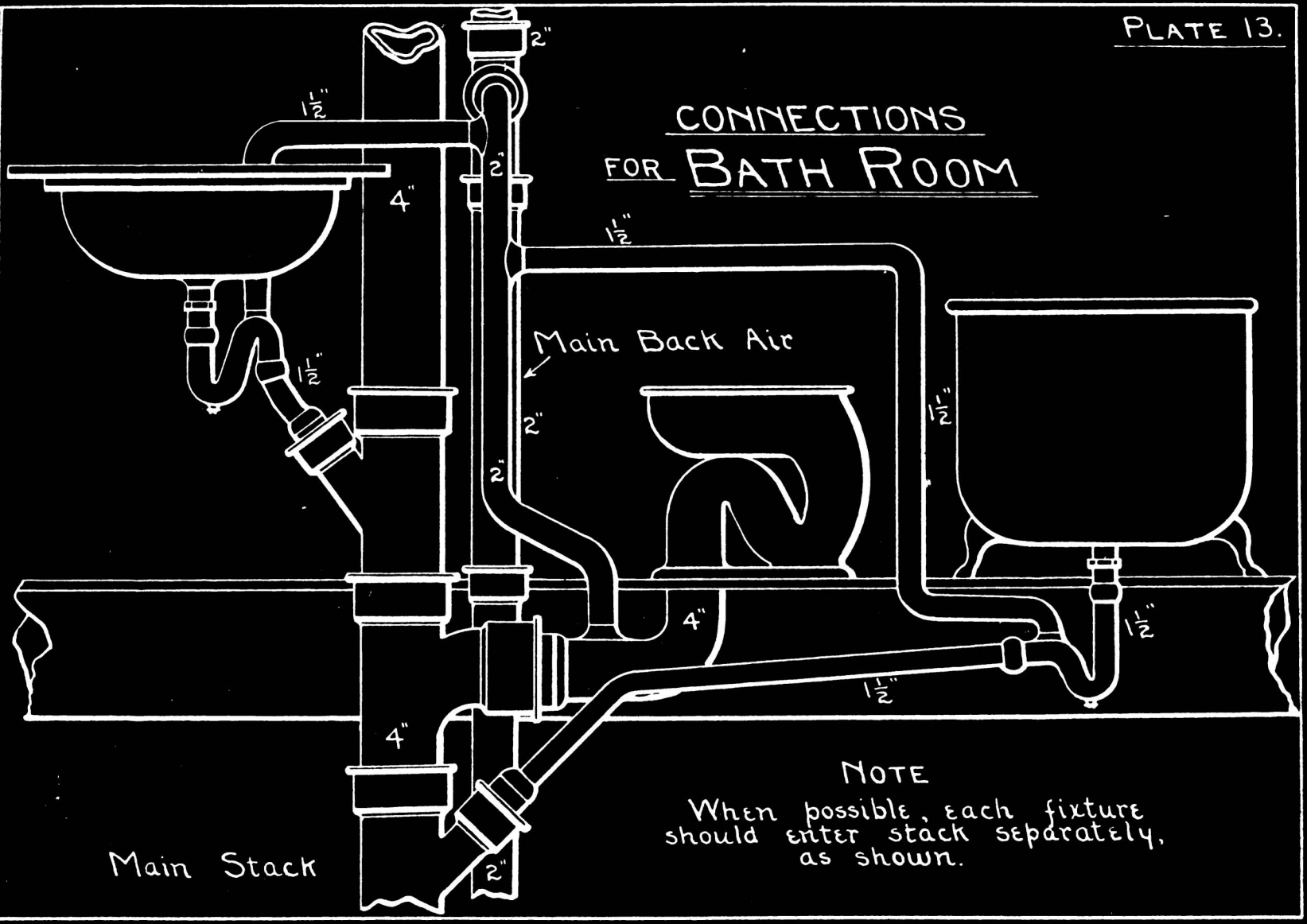
Cast iron sink about 3' x 5', all four sides of which pitch toward its centre

Vent

cleanout

PLATE 13.

CONNECTIONS FOR BATH ROOM



NOTE

When possible, each fixture should enter stack separately, as shown.

PLATE 14.

CONNECTIONS FOR BATH ROOM

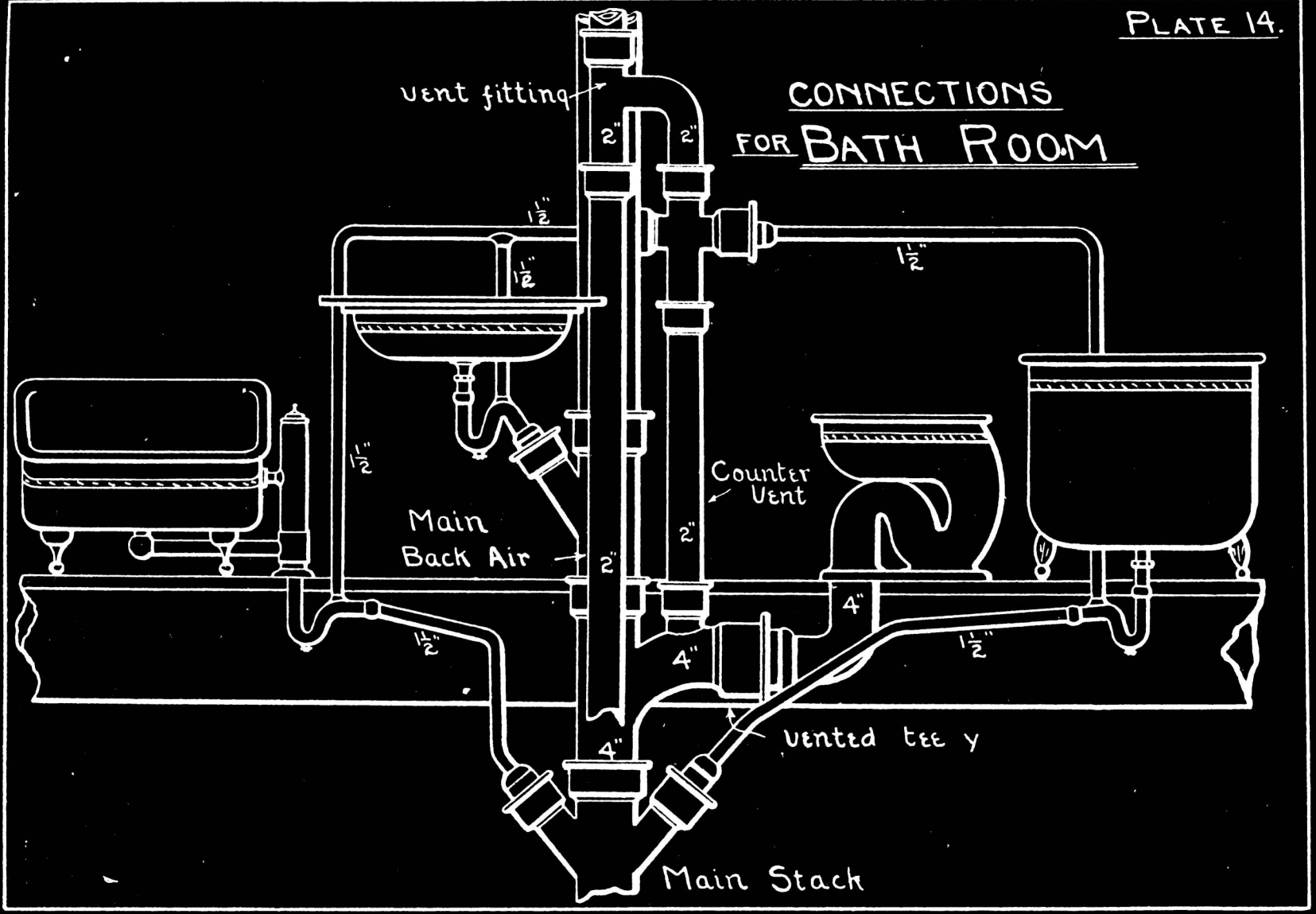
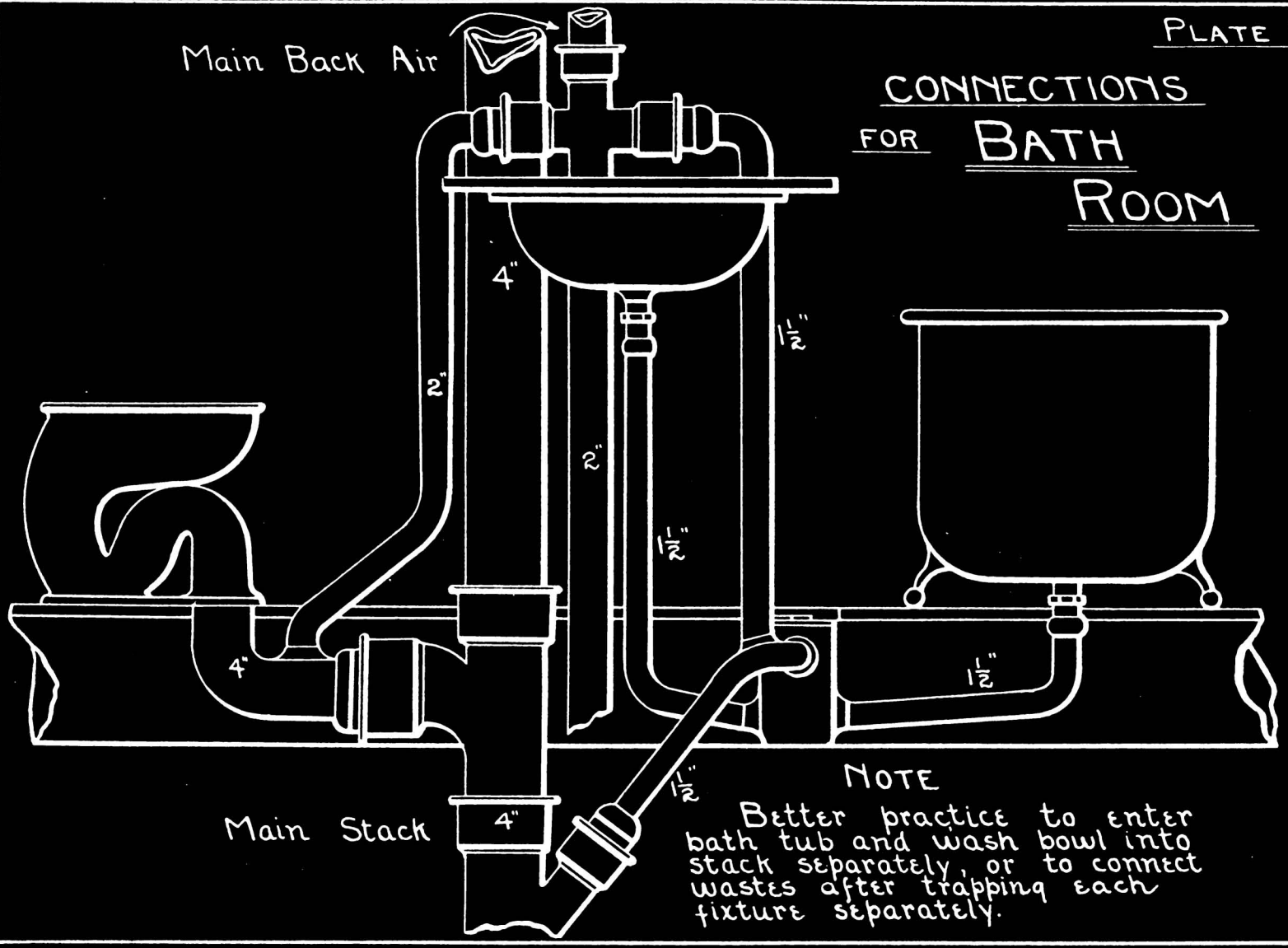


PLATE 15.

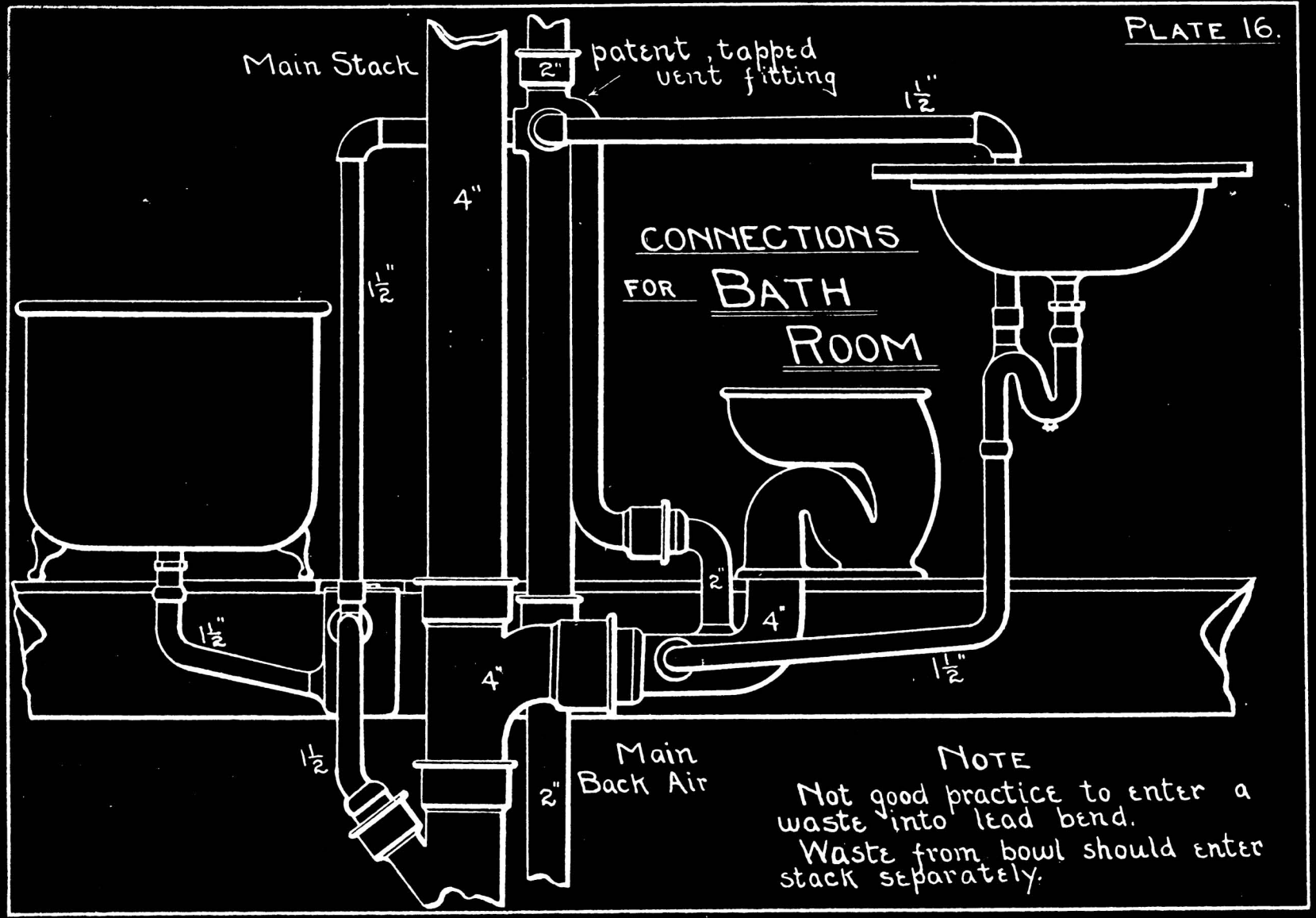
CONNECTIONS FOR BATH ROOM



NOTE

Better practice to enter bath tub and wash bowl into stack separately, or to connect wastes after trapping each fixture separately.

PLATE 16.



NOTE

Not good practice to enter a waste into lead bend.

Waste from bowl should enter stack separately.

PLATE 17.

THREE METHODS OF BACK VENTING WATER CLOSETS

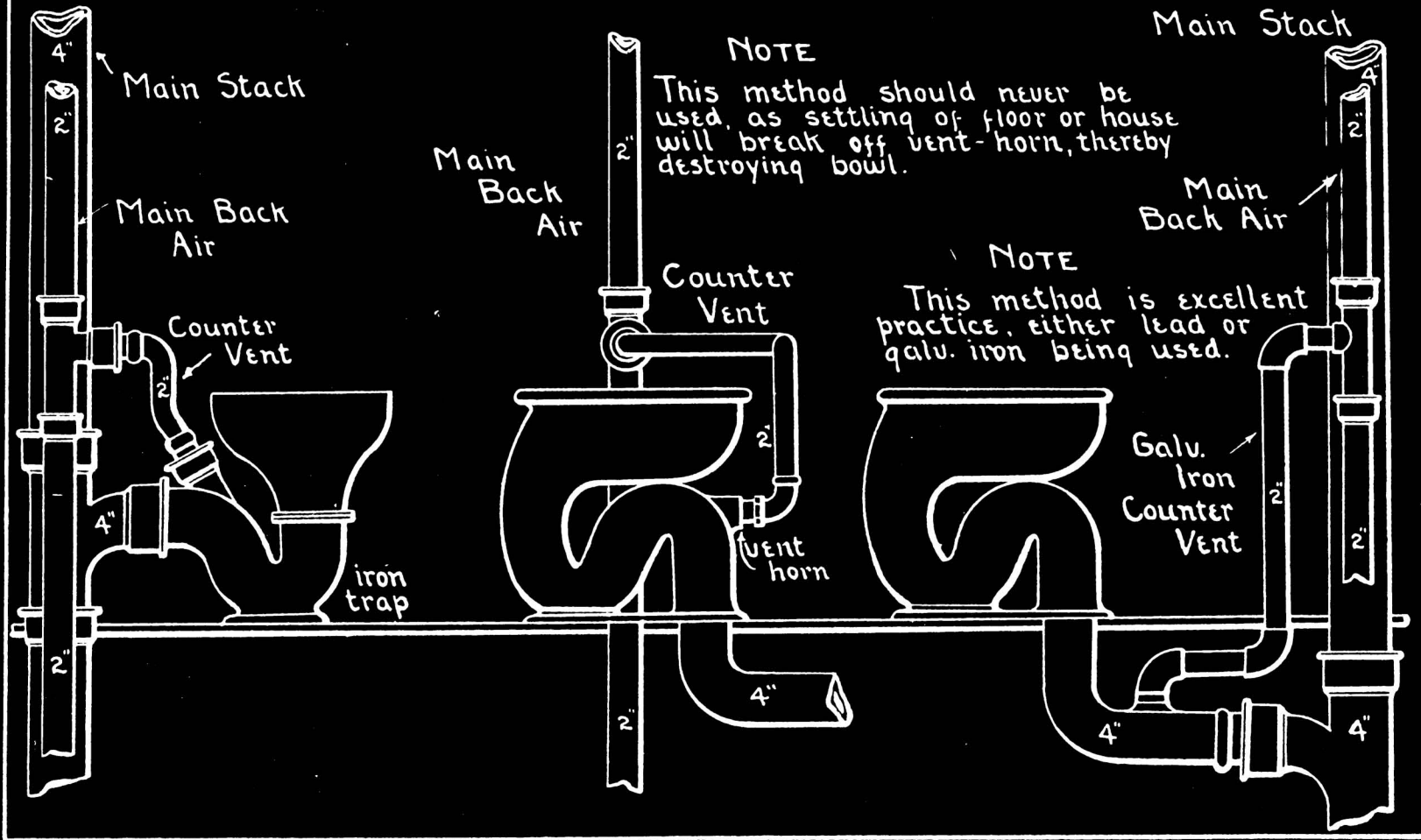
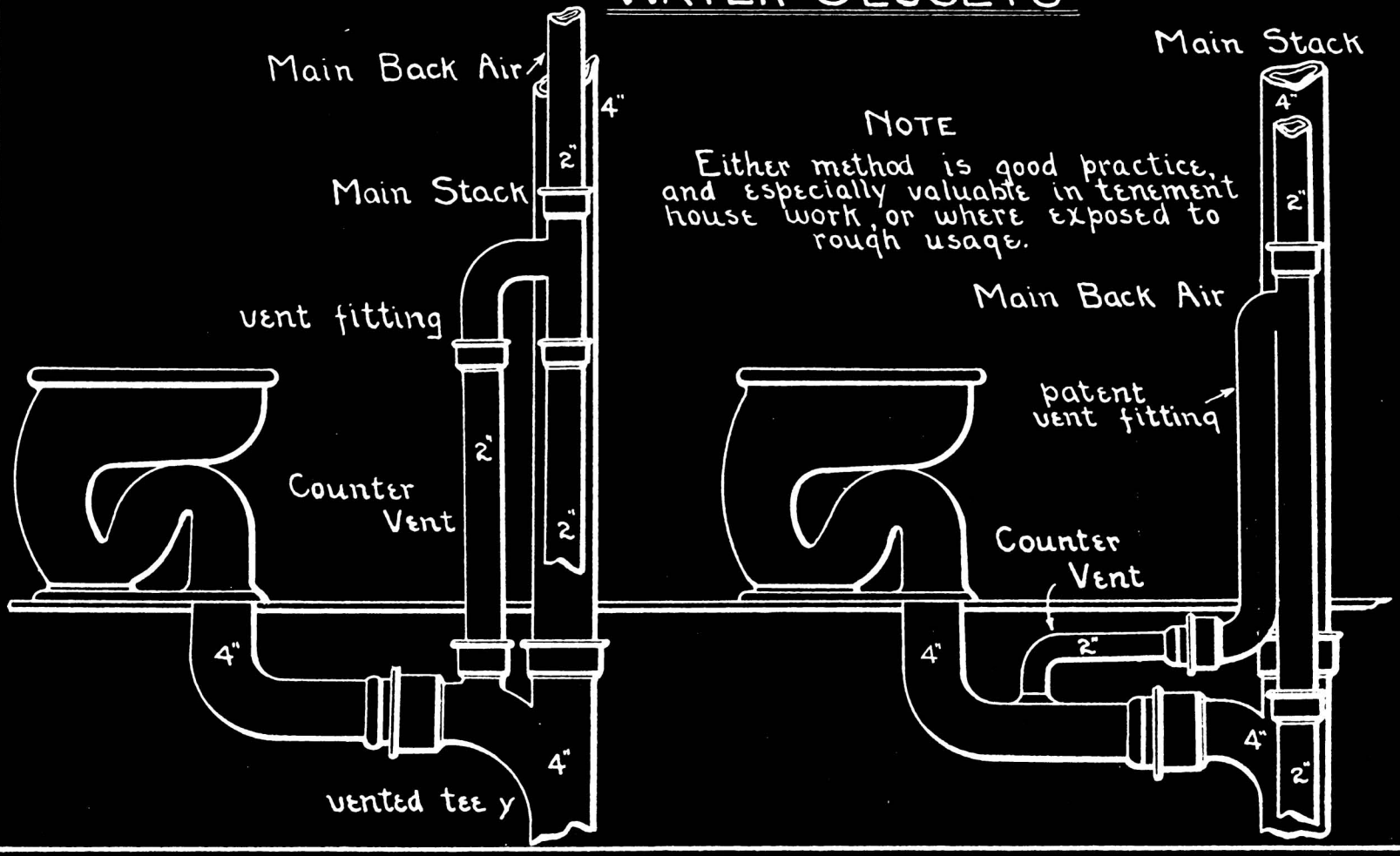


PLATE 18.

TWO METHODS OF BACK VENTING WATER CLOSETS

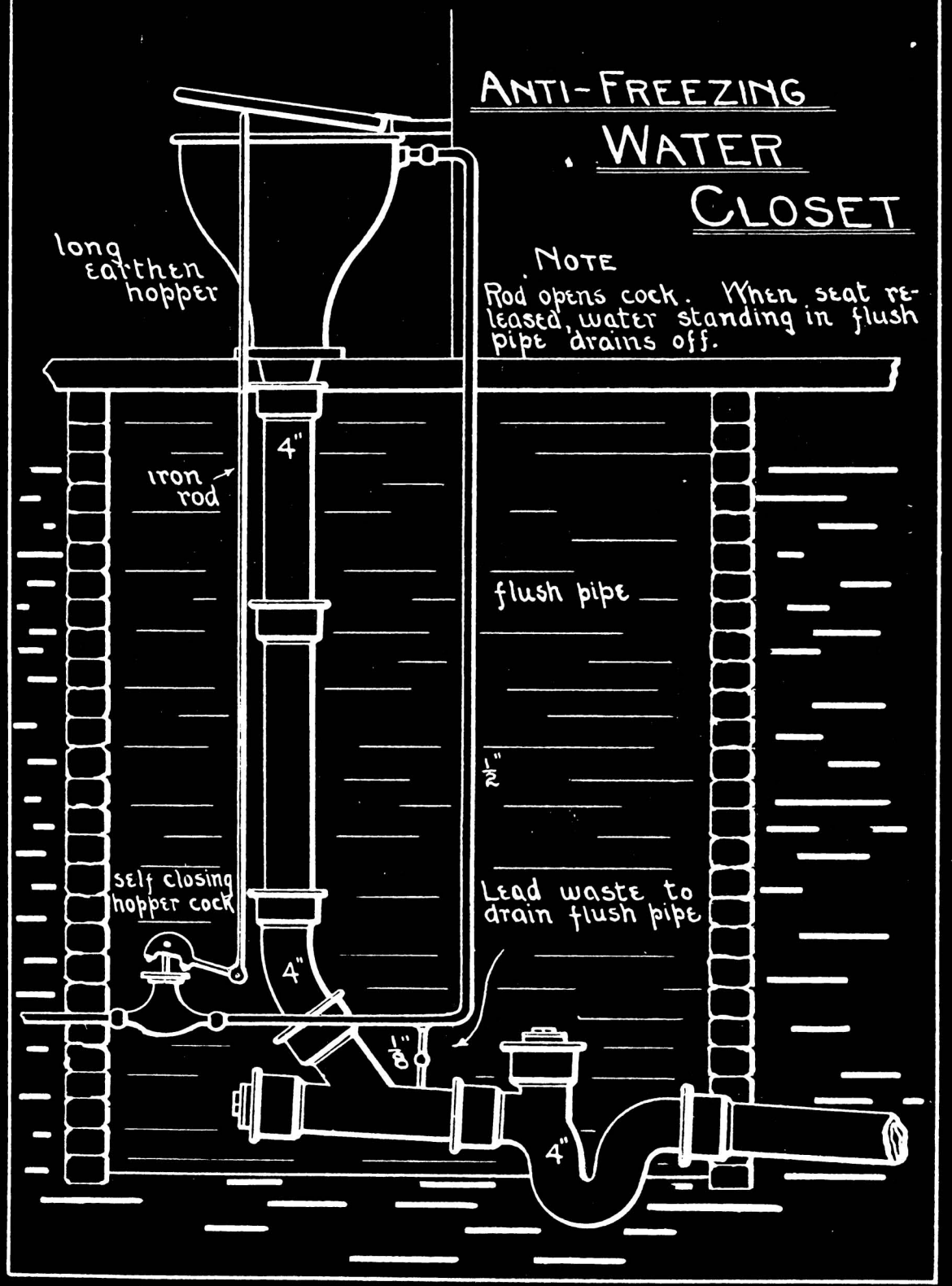


NOTE

Either method is good practice, and especially valuable in tenement house work, or where exposed to rough usage.

PLATE 19.

ANTI-FREEZING WATER CLOSET

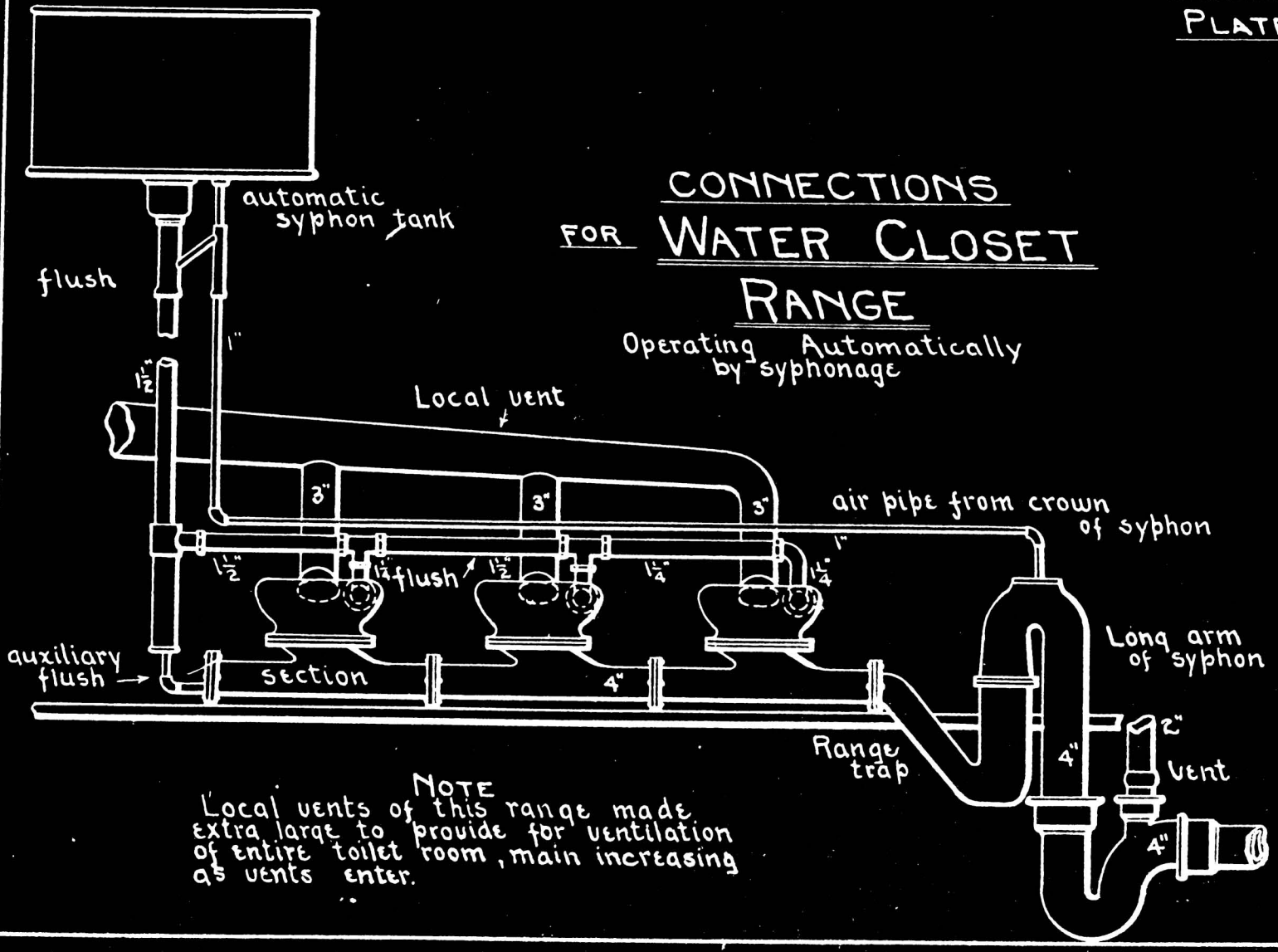


NOTE

Rod opens cock. When seat released, water standing in flush pipe drains off.

CONNECTIONS FOR WATER CLOSET RANGE

Operating Automatically by syphonage

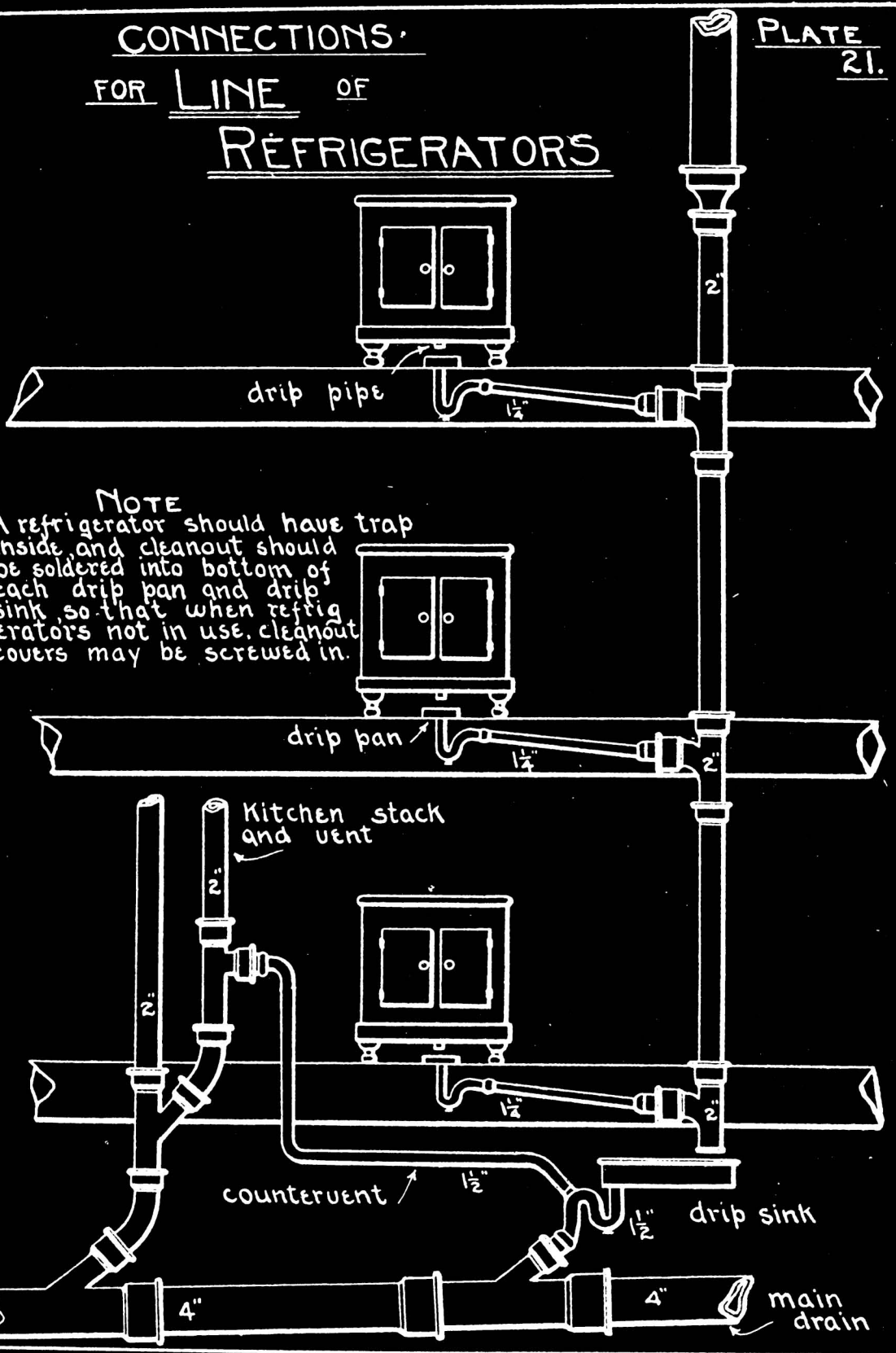


NOTE

Local vents of this range made extra large to provide for ventilation of entire toilet room, main increasing as vents enter.

CONNECTIONS FOR LINE OF REFRIGERATORS

PLATE 21.



TWO METHODS OF LOCAL VENTING

PLATE 22.

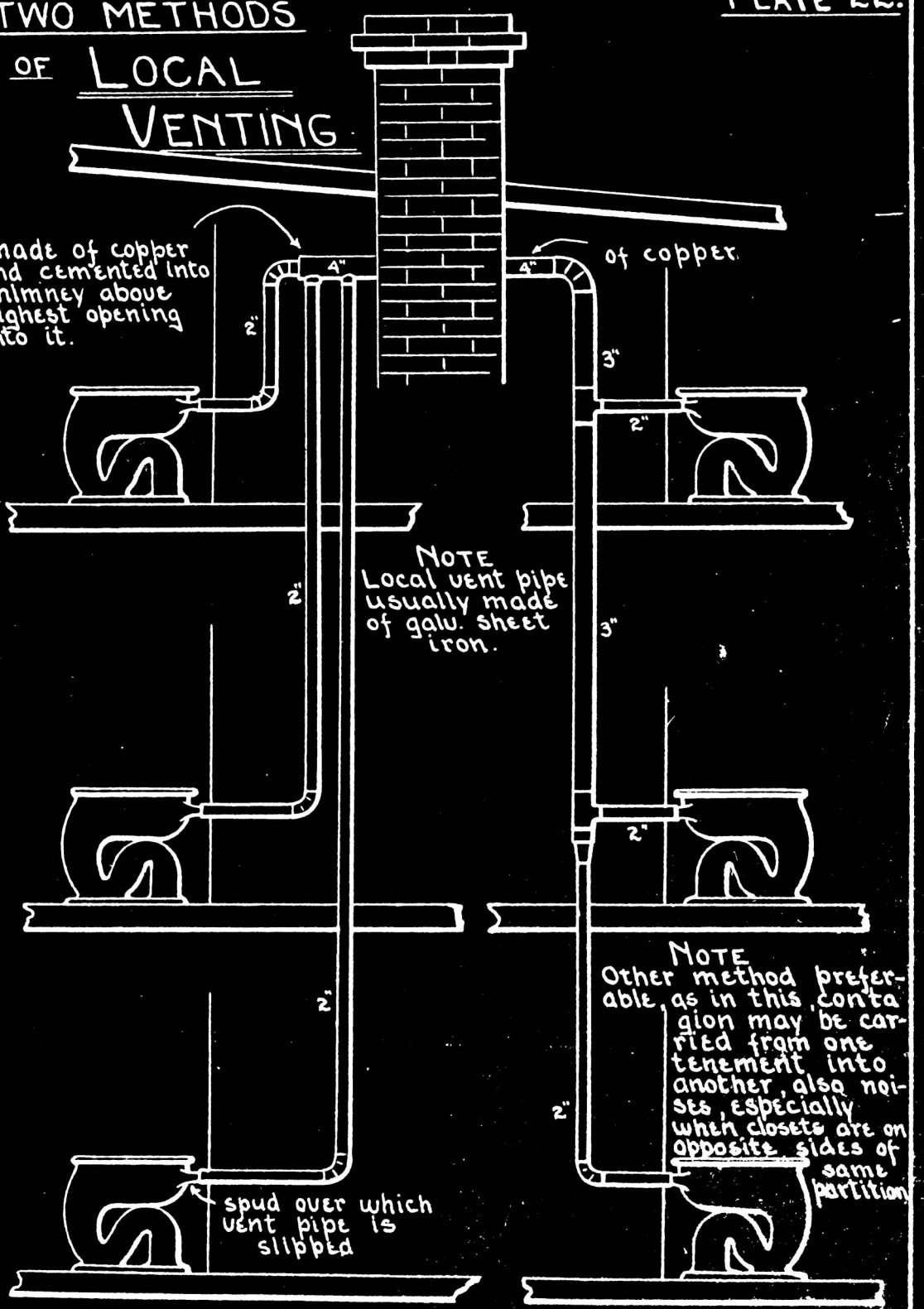


PLATE 23.

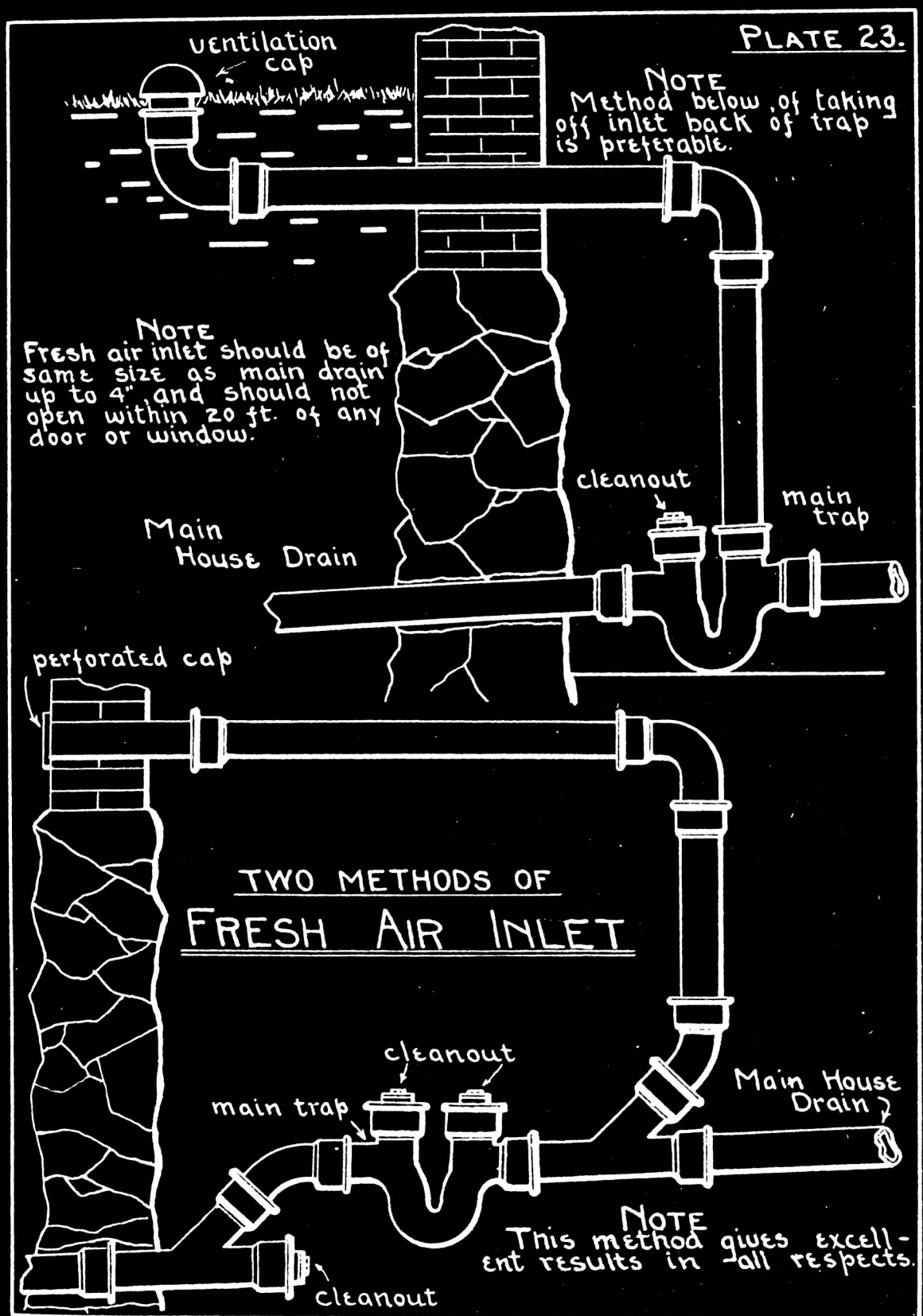

ventilation cap
NOTE
Method below, of taking off inlet back of trap is preferable.
NOTE
Fresh air inlet should be of same size as main drain up to 4" and should not open within 20 ft. of any door or window.
cleanout
main trap
Main House Drain
perforated cap
TWO METHODS OF
FRESH AIR INLET
cleanout
main trap
Main House Drain
NOTE
This method gives excellent results in all respects.
cleanout

PLATE 24.

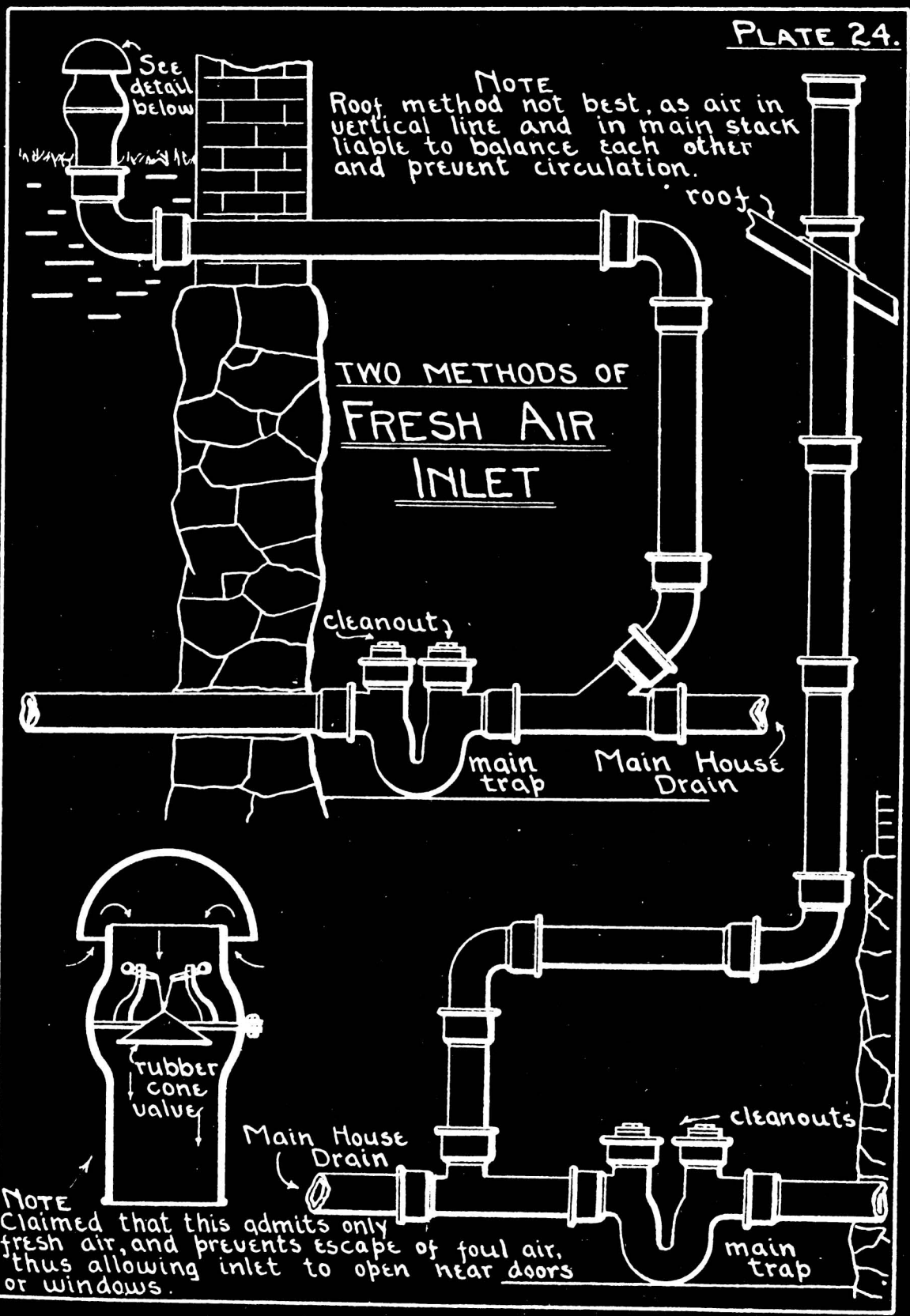
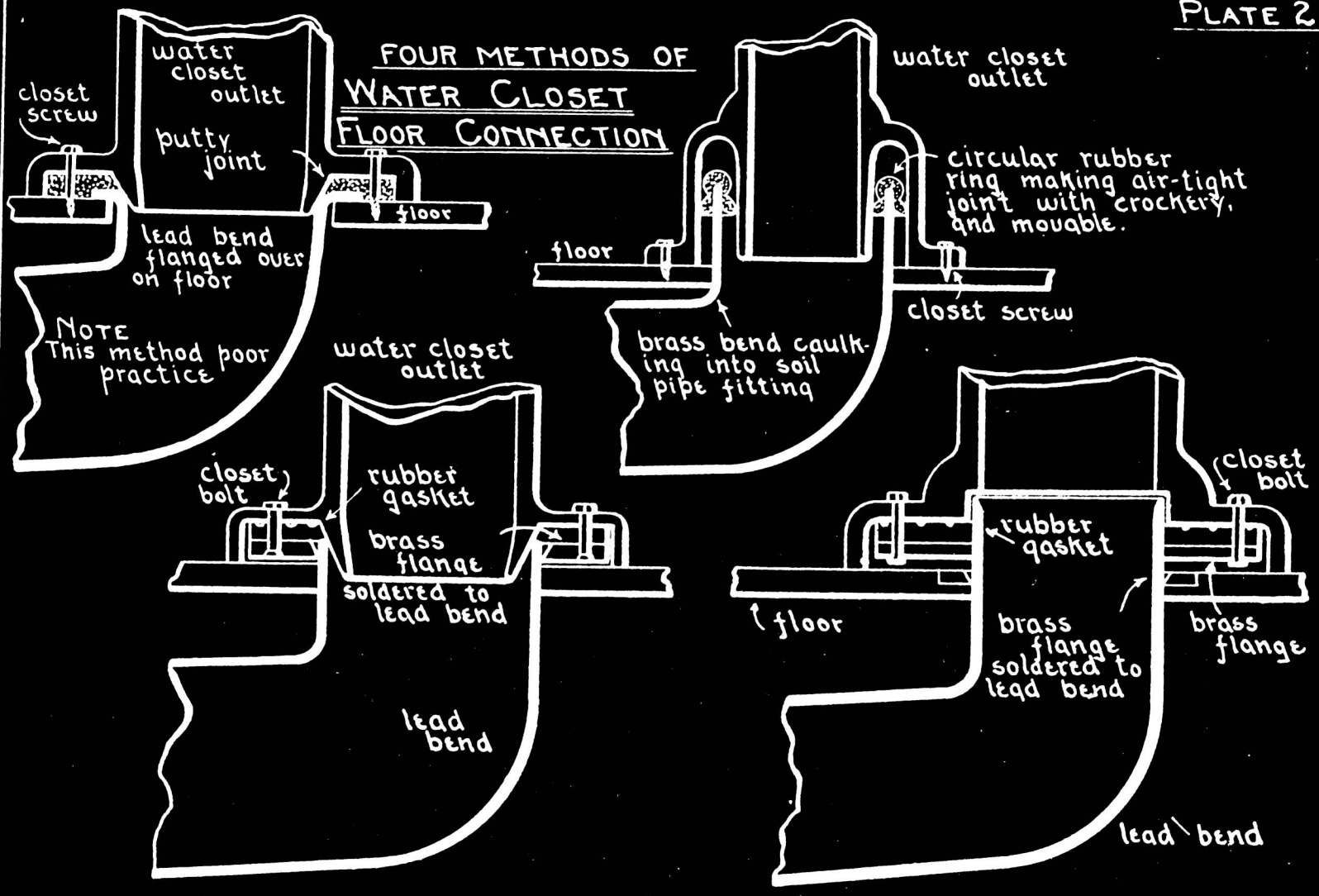

See detail below
NOTE
Roof method not best, as air in vertical line and in main stack liable to balance each other and prevent circulation.
roof
TWO METHODS OF
FRESH AIR
INLET
cleanout
main trap
Main House Drain
rubber cone valve
Main House Drain
cleanouts
main trap
NOTE
Claimed that this admits only fresh air, and prevents escape of foul air, thus allowing inlet to open near doors or windows.

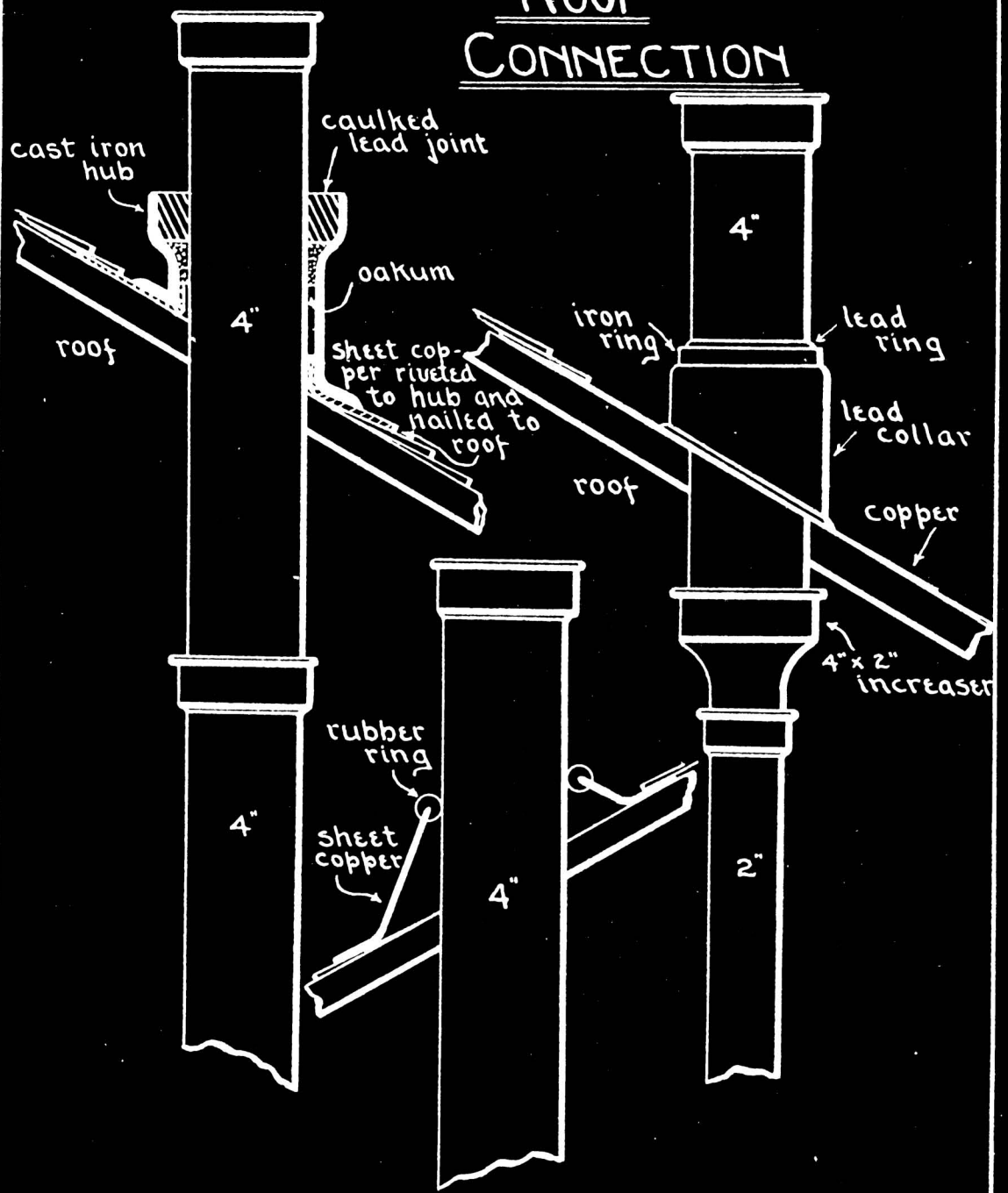
PLATE 25.

FOUR METHODS OF WATER CLOSET FLOOR CONNECTION



THREE METHODS OF ROOF CONNECTION

PLATE 26.



NOTE

A pipe of less than 4" should be increased to at least 4" before passing through roof, to prevent closing up of a smaller opening by hoar frost.

TWO METHODS OF

ROOF CONNECTION

PLATE 27.

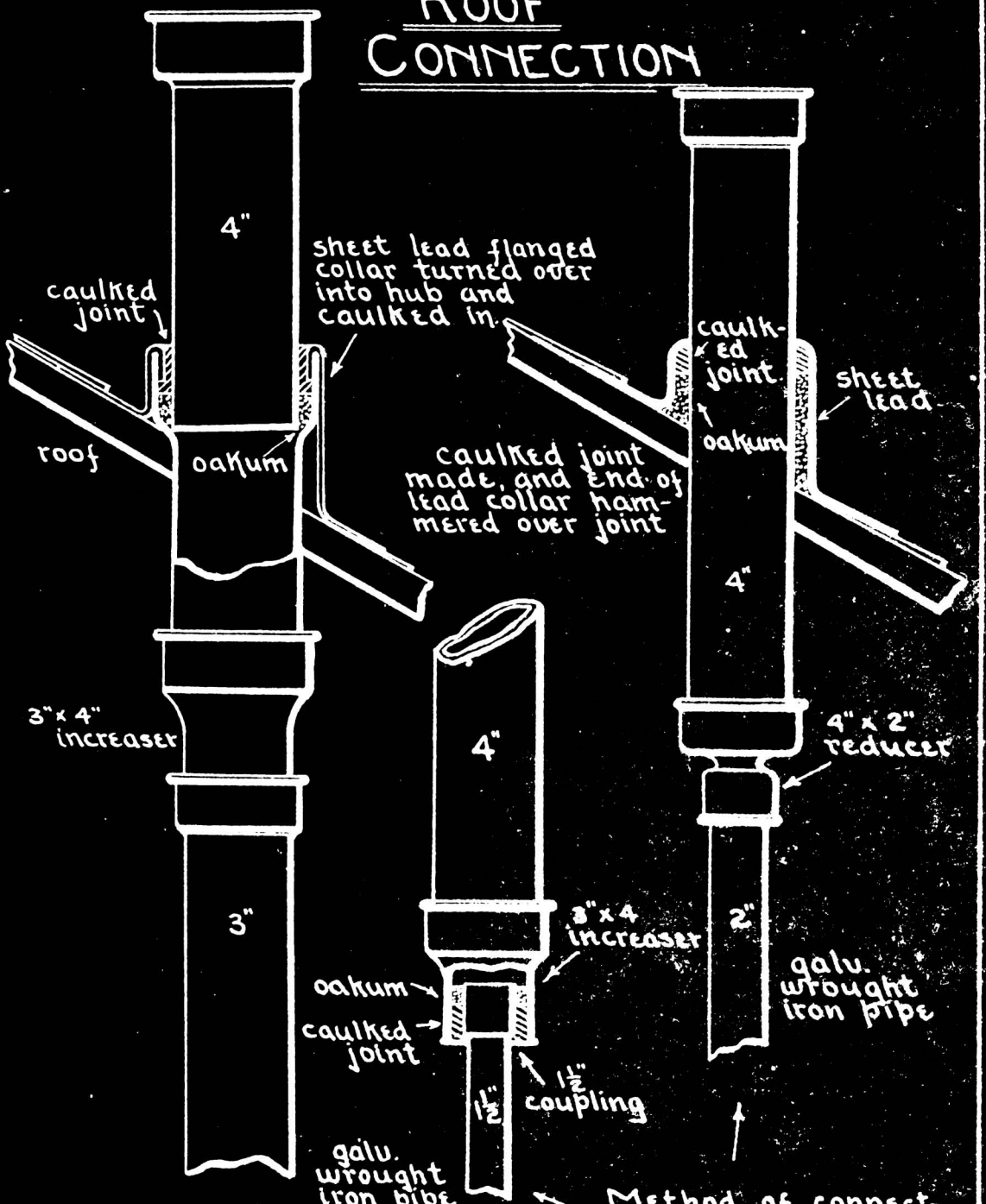


PLATE 28.

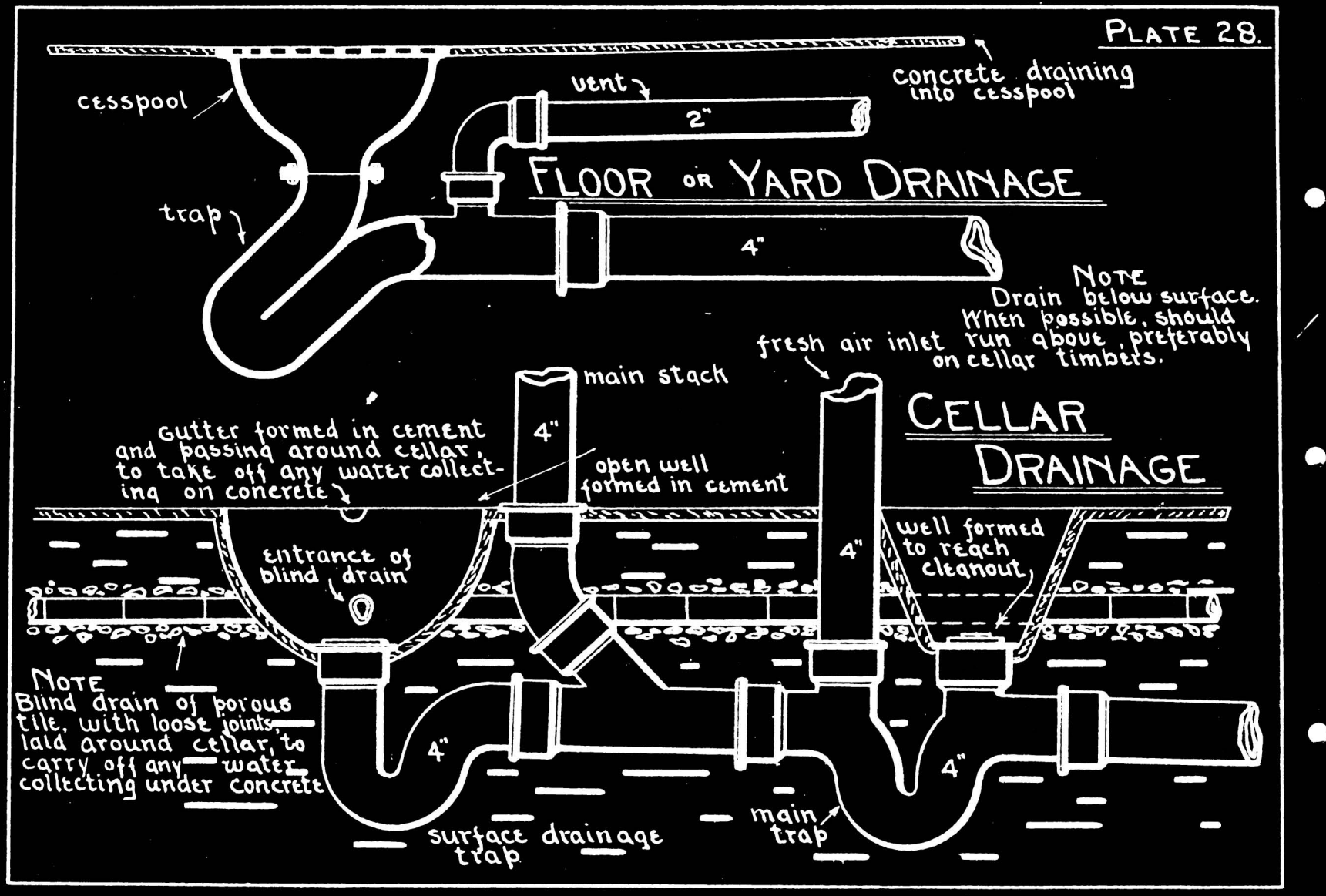

concrete draining into cesspool
cesspool
vent
2"
trap
FLOOR OR YARD DRAINAGE
4"
NOTE
Drain below surface. When possible, should run above, preferably on cellar timbers.
fresh air inlet
main stack
4"
CELLAR DRAINAGE
Gutter formed in cement and passing around cellar, to take off any water collecting on concrete
open well formed in cement
entrance of blind drain
4"
well formed to reach cleanout
NOTE
Blind drain of porous tile, with loose joints, laid around cellar, to carry off any water collecting under concrete
4"
4"
surface drainage trap
main trap

PLATE 29.

METHODS OF SUPPORTING HORIZONTAL AND VERTICAL LINES OF SOIL PIPE

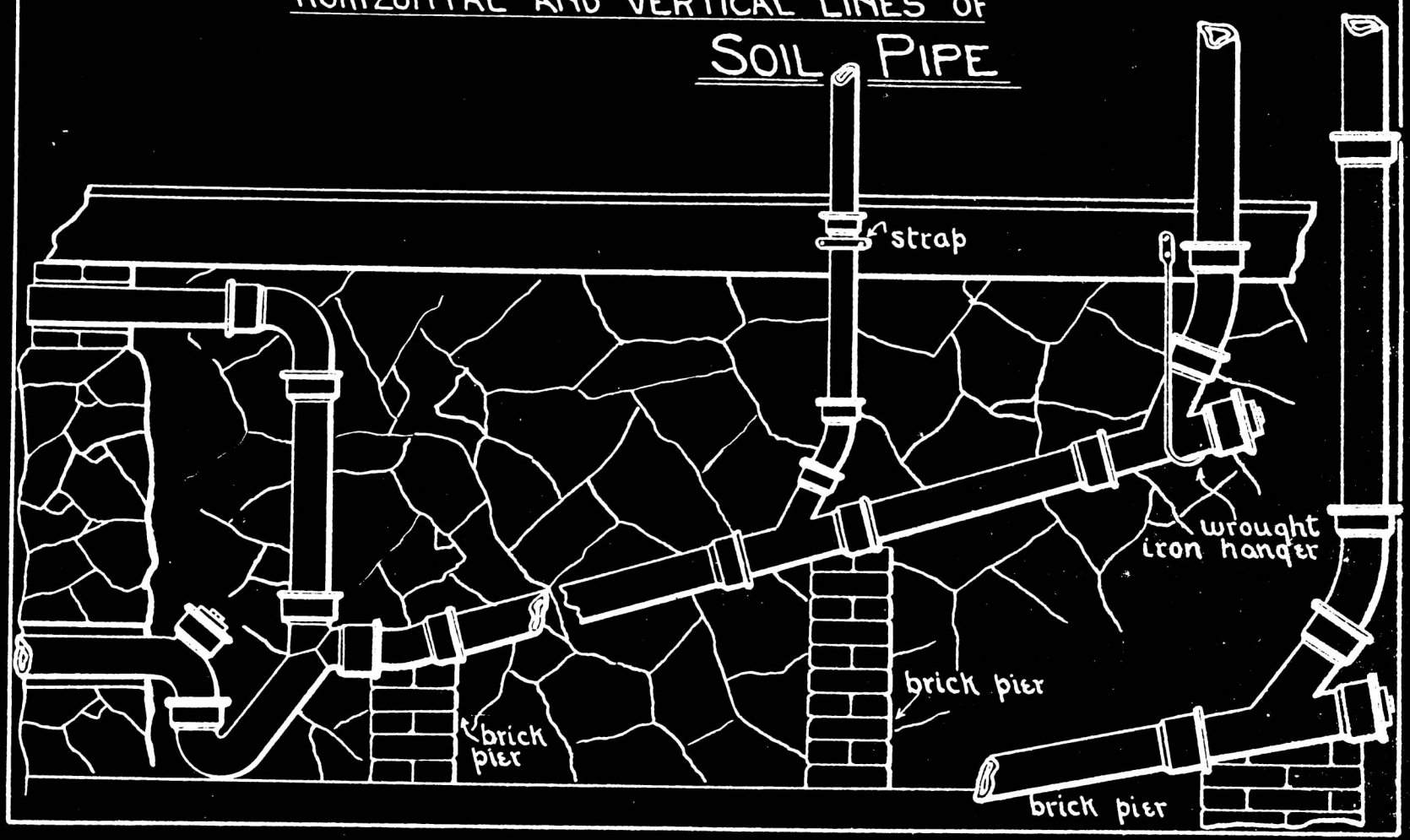


PLATE 30.

TWO METHODS OF ENTERING VERTICAL STACK

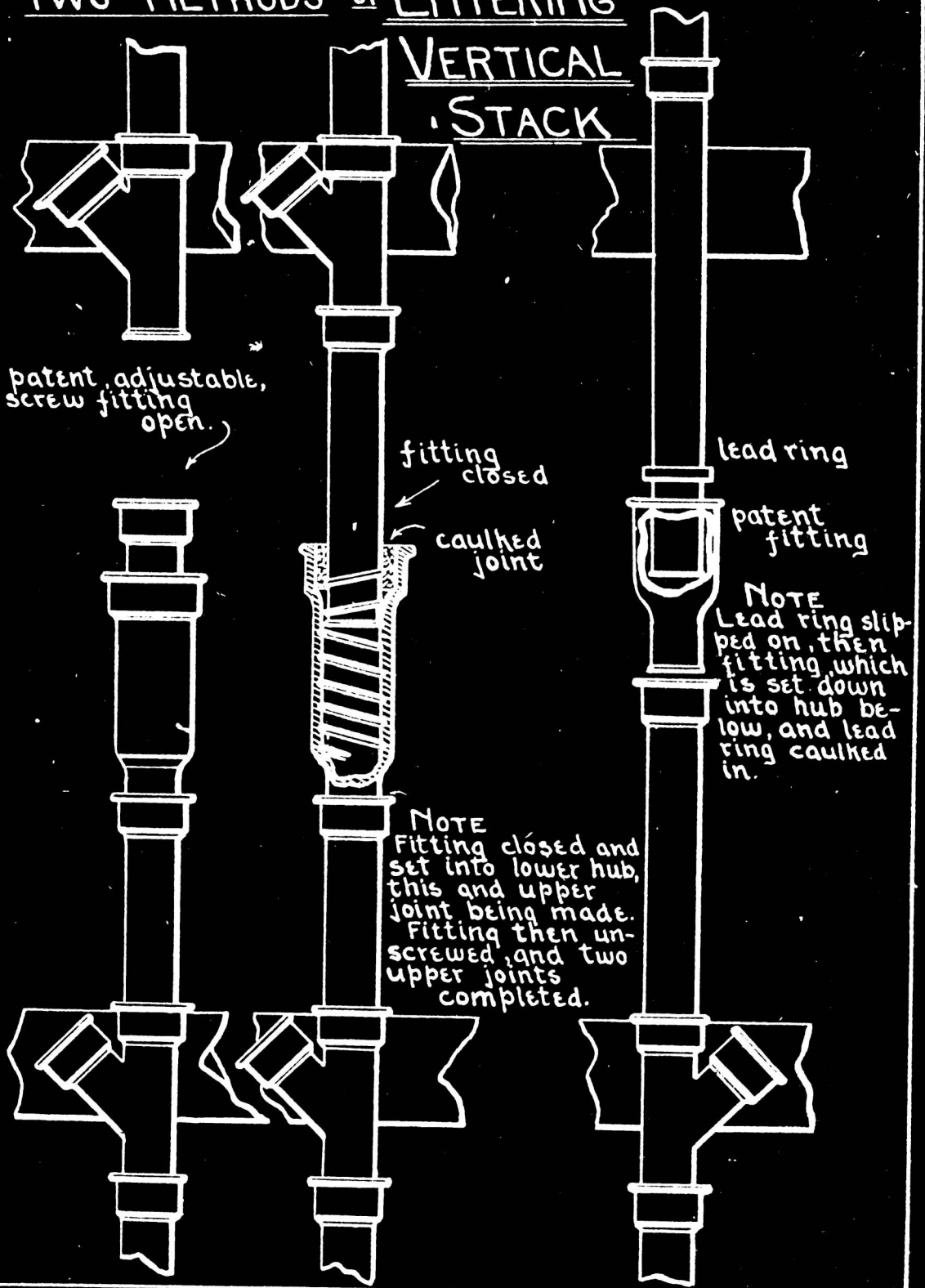


PLATE 31.

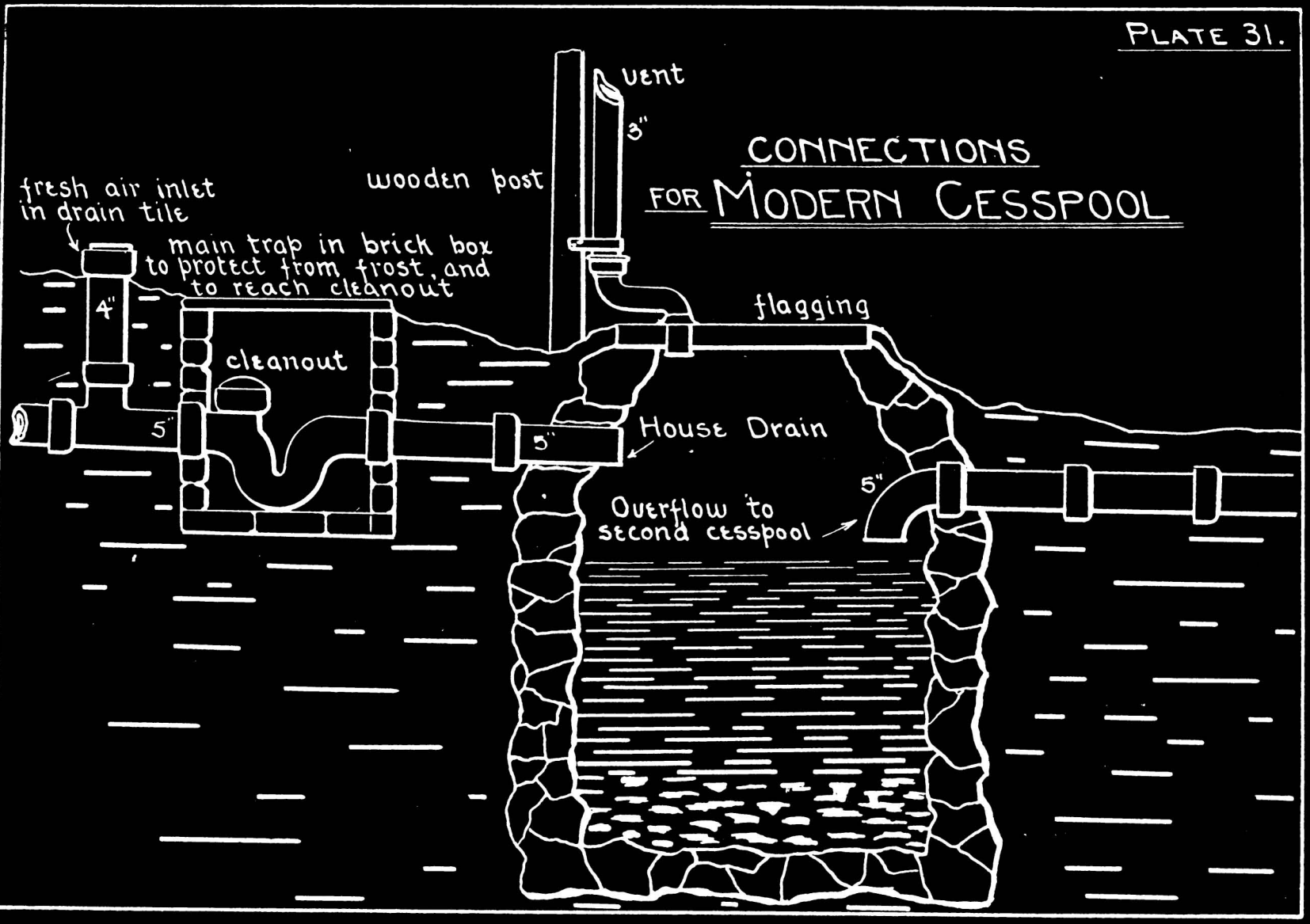
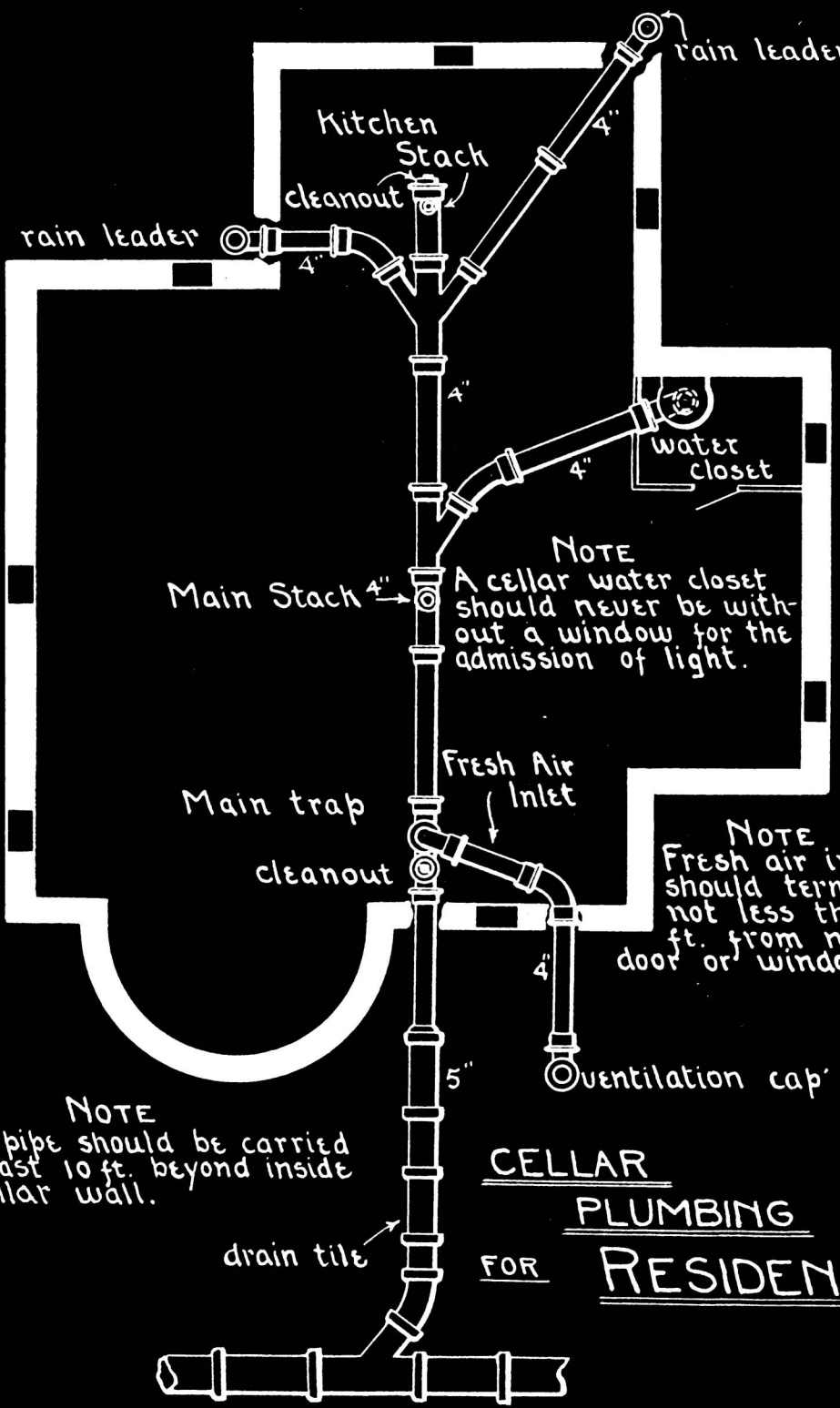
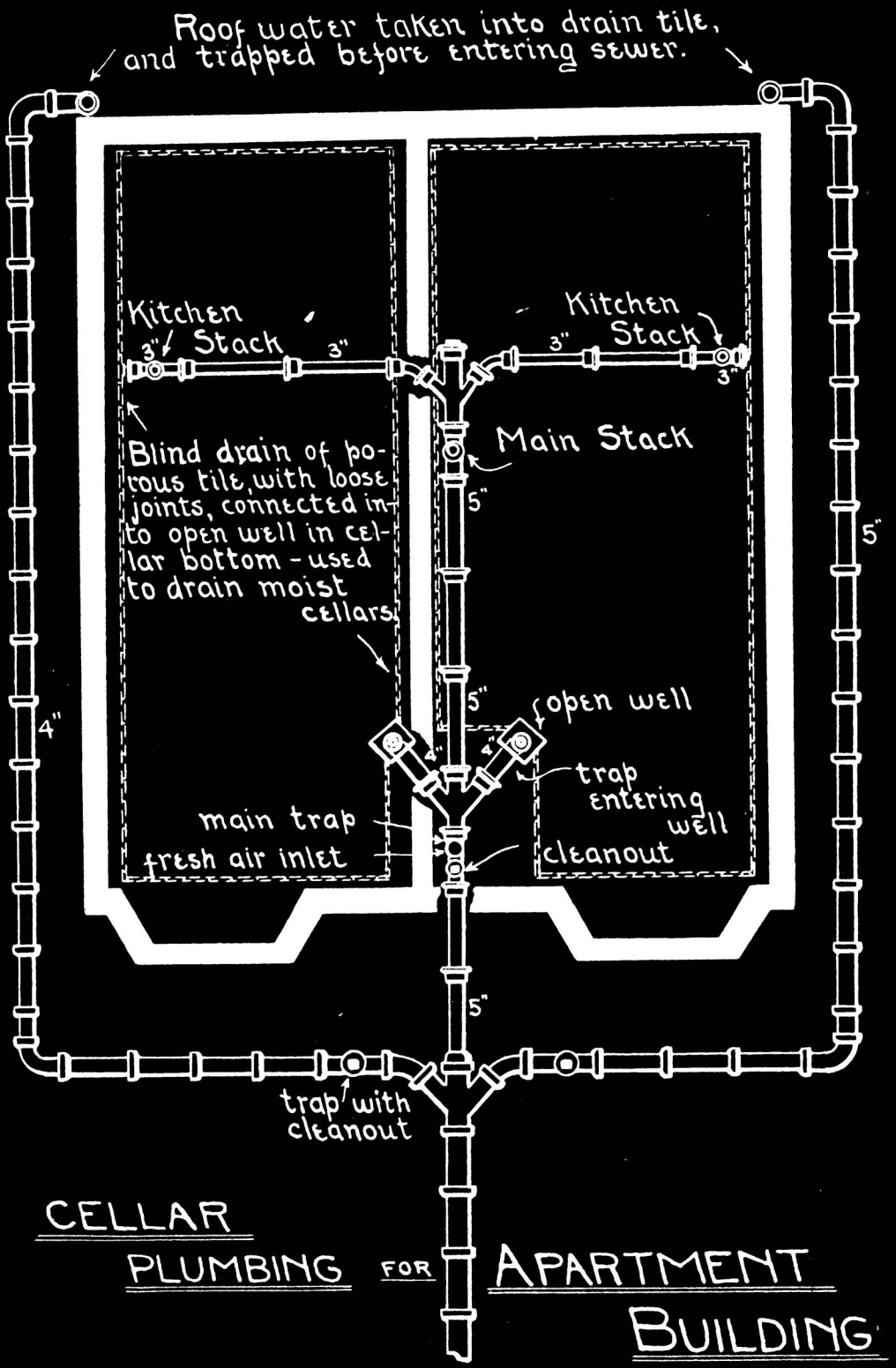

vent
3"
CONNECTIONS
FOR MODERN CESSPOOL
fresh air inlet
in drain tile
wooden post
main trap in brick box
to protect from frost and
to reach cleanout
4"
cleanout
flagging
5"
5"
House Drain
5"
Overflow to
second cesspool

PLATE 32.



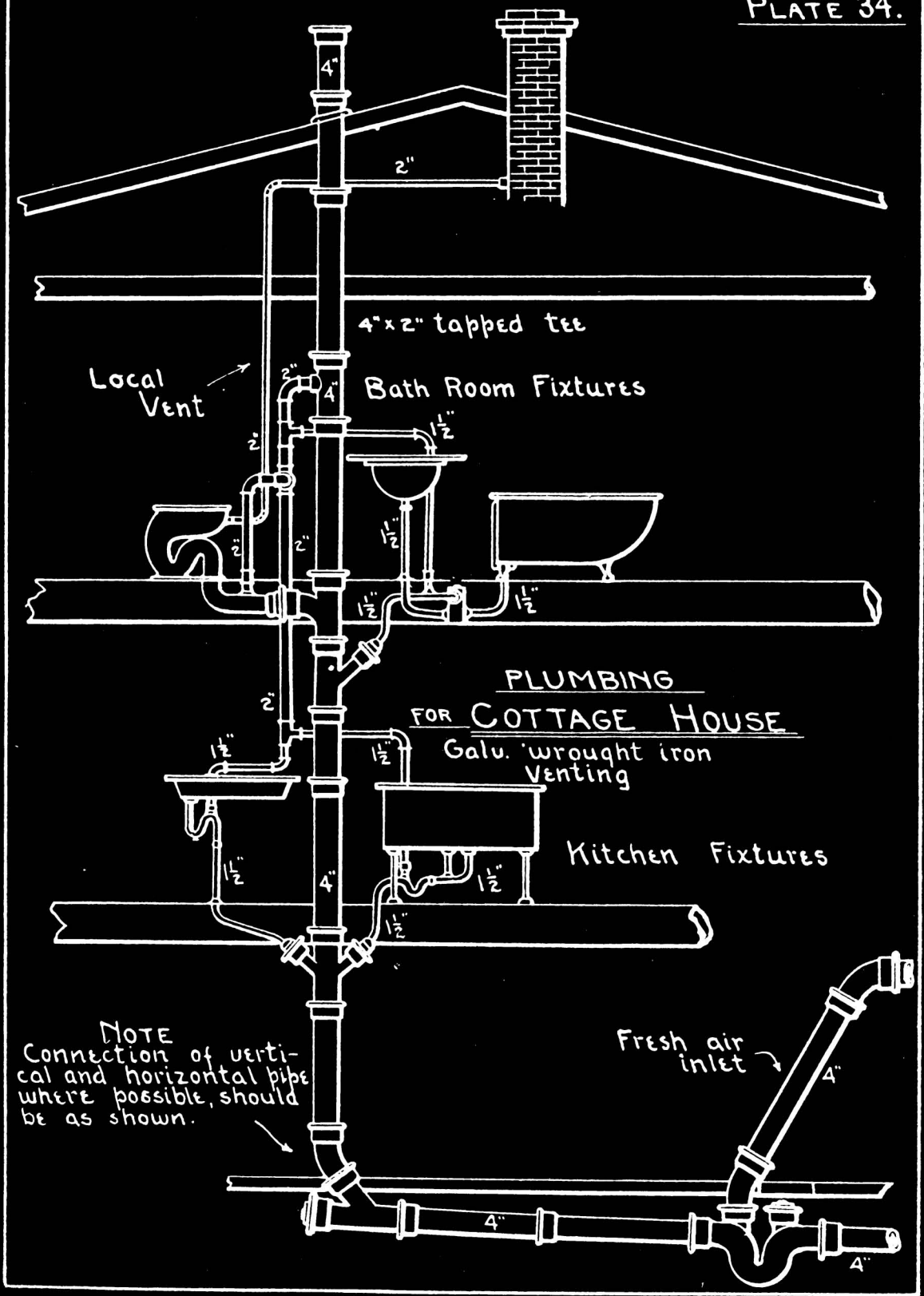
CELLAR PLUMBING FOR RESIDENCE

PLATE 33.



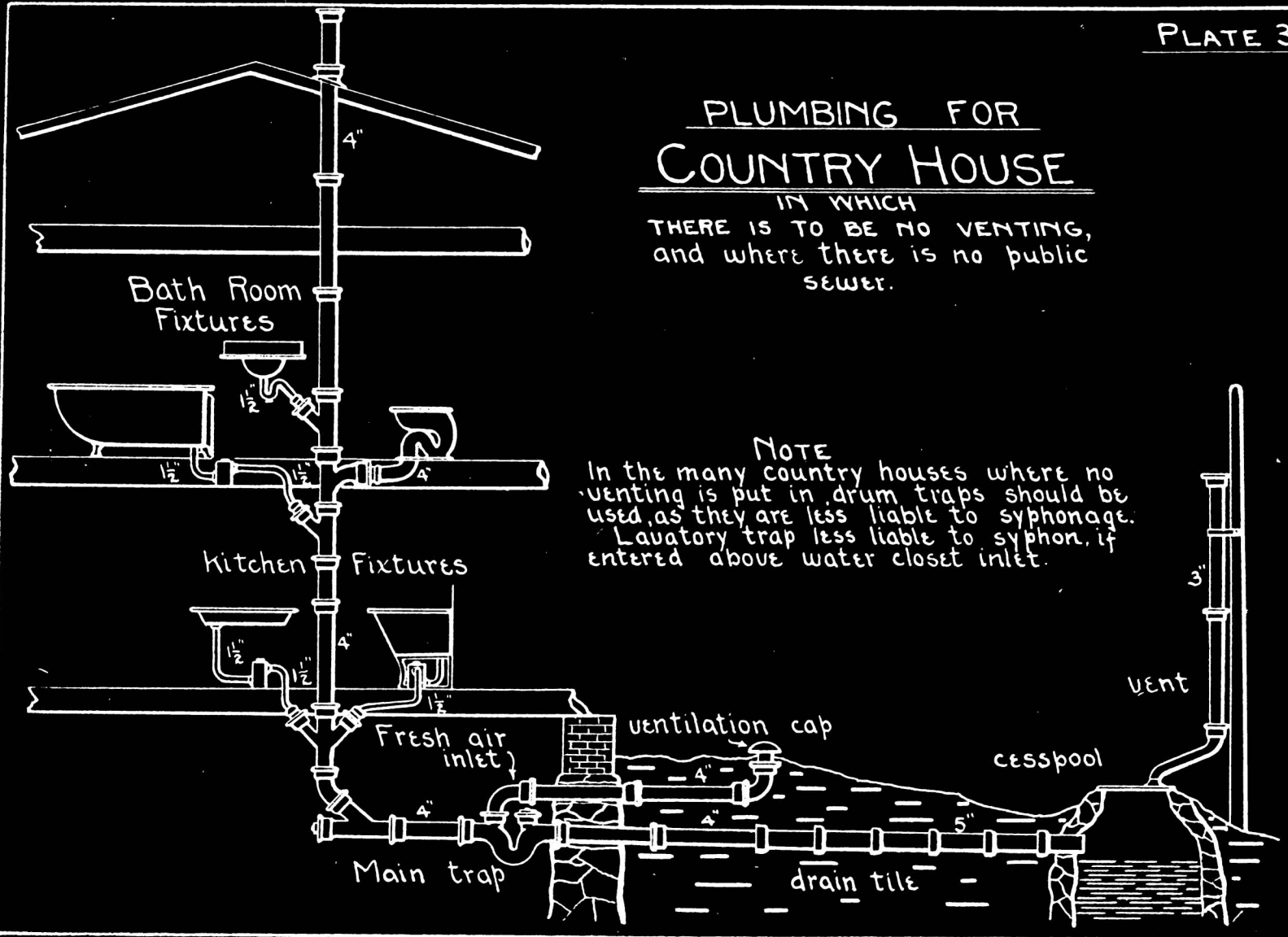
CELLAR PLUMBING FOR APARTMENT BUILDING

PLATE 34.


4"
2"
4"x2" tapped tee
Local Vent
2"
4"
Bath Room Fixtures
2"
1½"
2"
2"
1½"
1½"
1½"
2"
PLUMBING
FOR COTTAGE HOUSE
Galv. wrought iron Venting
1½"
1½"
Kitchen Fixtures
1½"
4"
1½"
1½"
NOTE
Connection of vertical and horizontal pipe where possible, should be as shown.
Fresh air inlet
4"
4"
4"

PLUMBING FOR COUNTRY HOUSE

IN WHICH THERE IS TO BE NO VENTING, and where there is no public sewer.



NOTE

In the many country houses where no venting is put in, drum traps should be used, as they are less liable to syphonage. Lavatory trap less liable to syphon, if entered above water closet inlet.

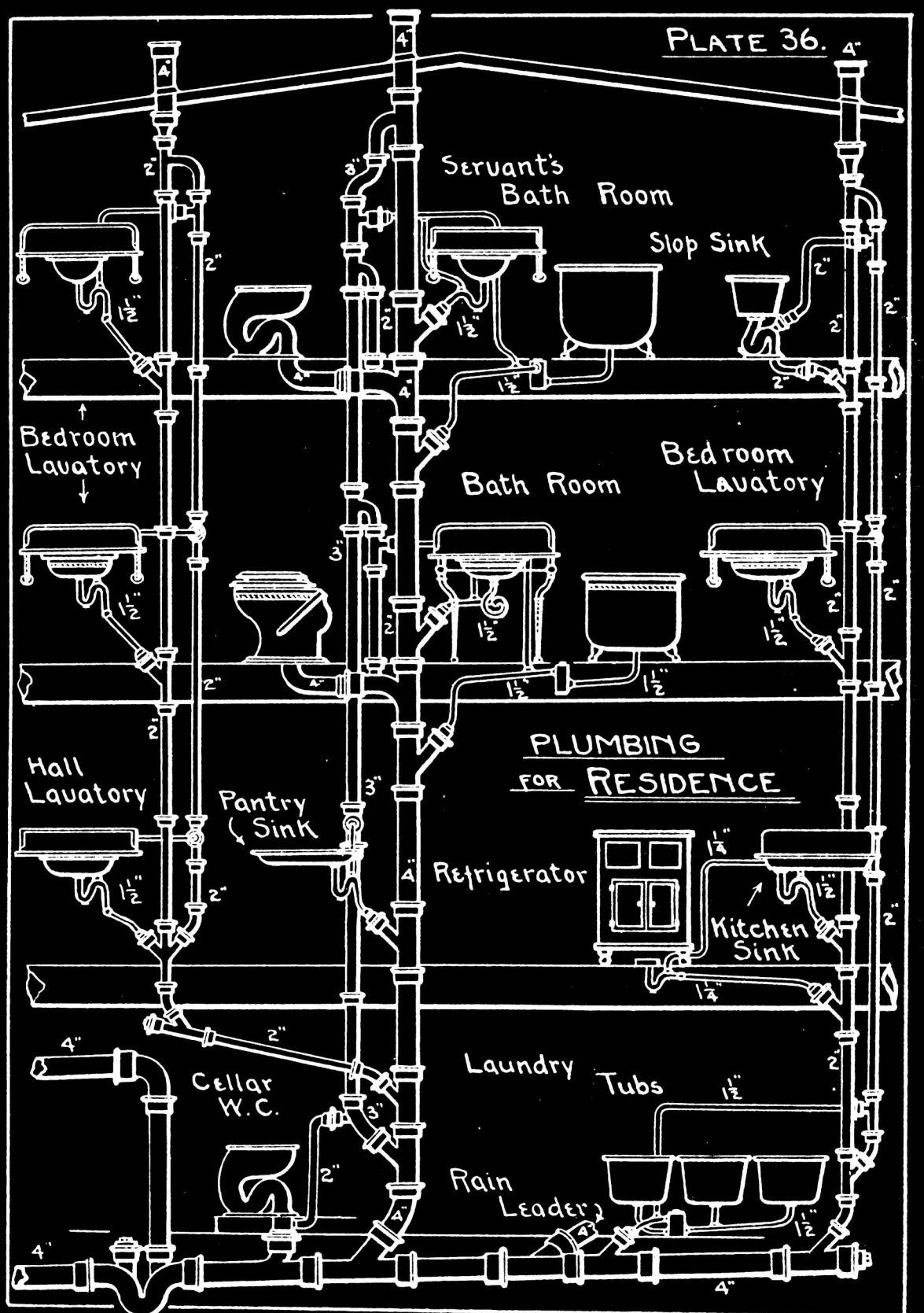


PLATE 36.
Servant's Bath Room
Slop Sink
Bedroom Lavatory
Bath Room
Bedroom Lavatory
Hall Lavatory
Pantry Sink
PLUMBING FOR RESIDENCE
Refrigerator
Kitchen Sink
Laundry Tubs
Cellar W.C.
Rain Leader

PLATE 37.

ROUGHING FOR TWO TENEMENT HOUSE

SHOWING WORK UNDER WATER TEST.

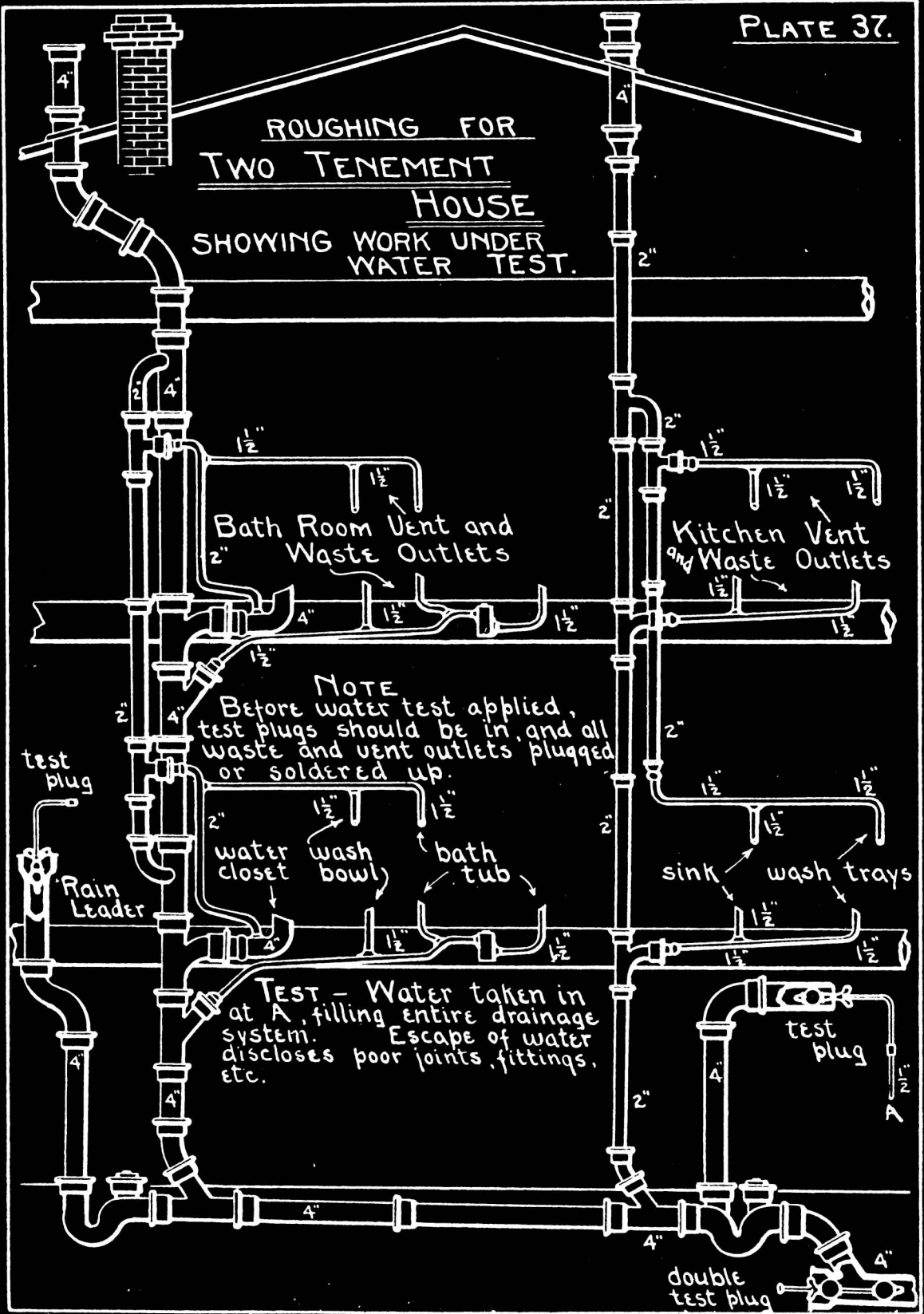


PLATE 38.

PLUMBING FOR TWO-TENEMENT HOUSE

showing work ready for peppermint test

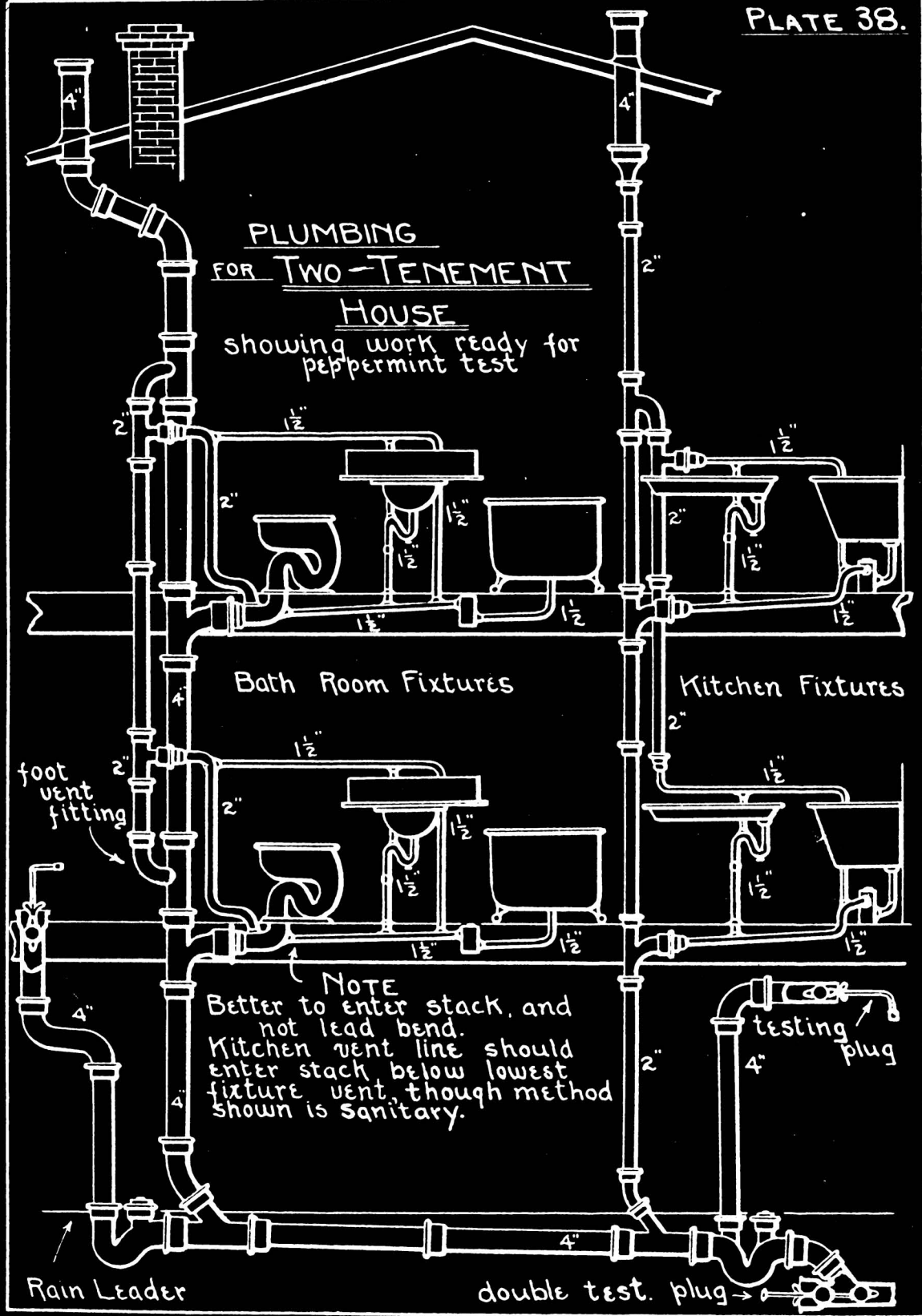
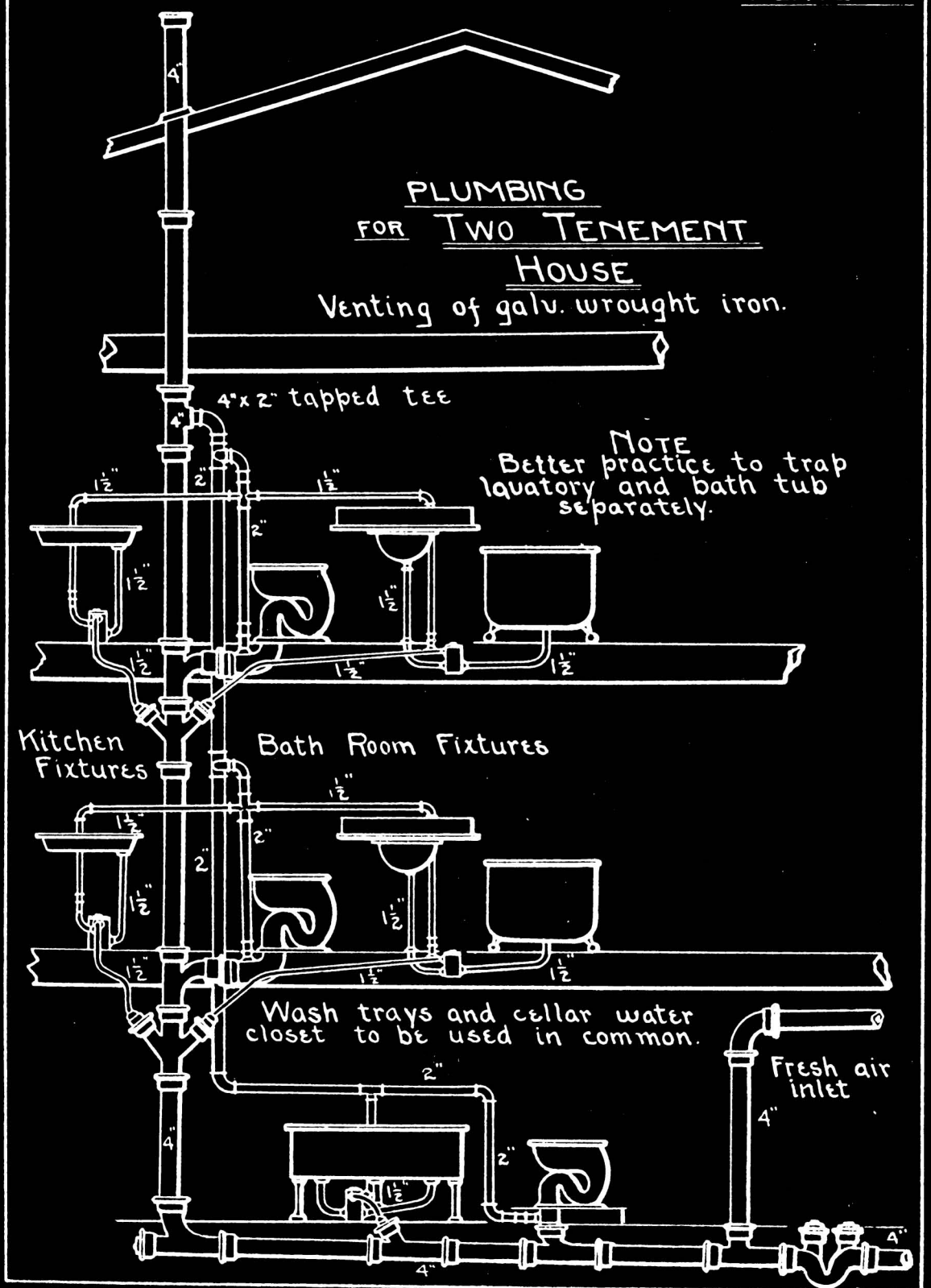


PLATE 39.


PLUMBING
FOR TWO TENEMENT
HOUSE
Venting of galv. wrought iron.
4"x 2" tapped tee
NOTE
Better practice to trap lavatory and bath tub separately.
Kitchen Fixtures
Bath Room Fixtures
Wash trays and cellar water closet to be used in common.
Fresh air inlet
4"
2"
1½"

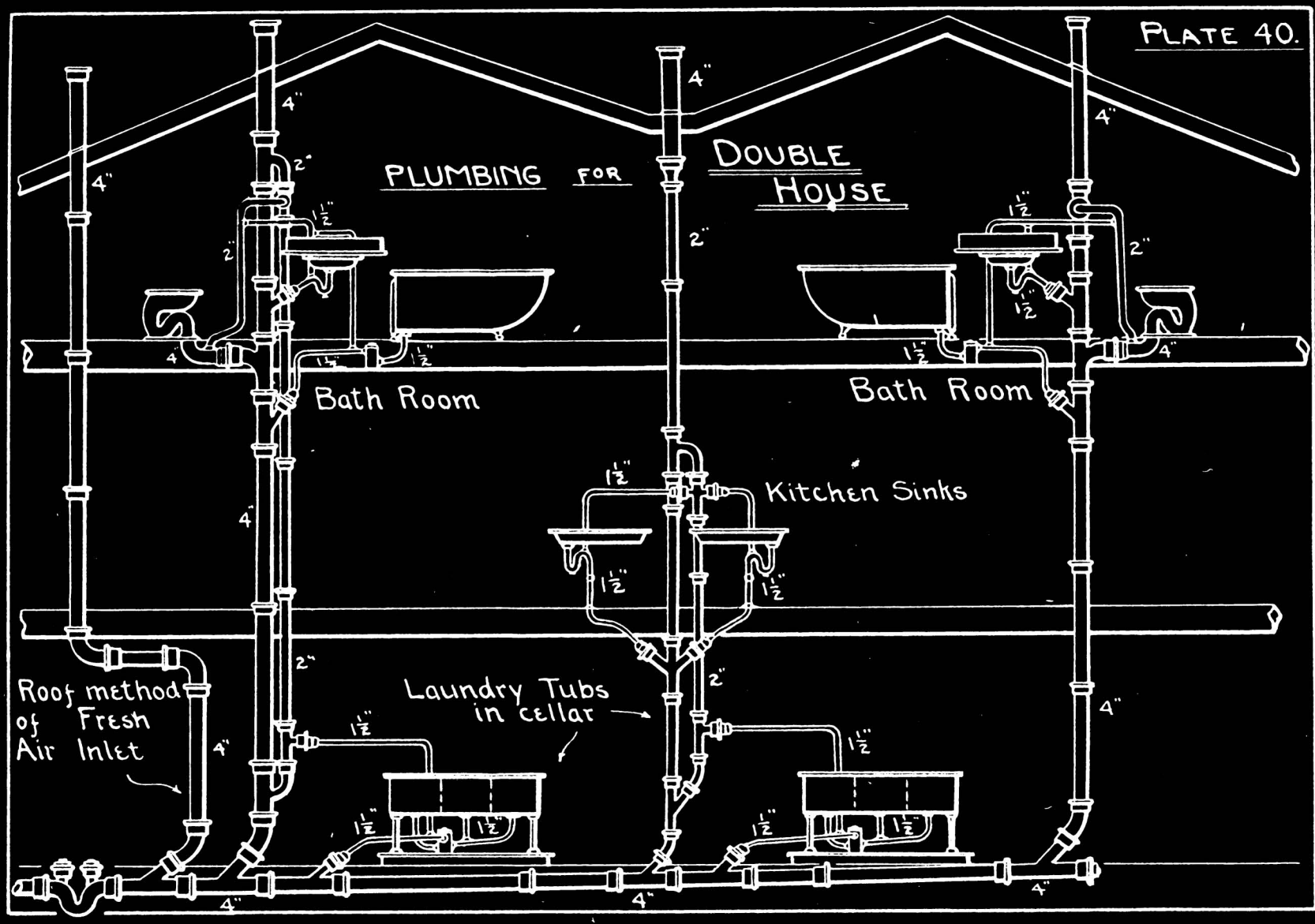


PLATE 40.
PLUMBING FOR DOUBLE HOUSE
Bath Room
Bath Room
Kitchen Sinks
Laundry Tubs in cellar
Roof method of Fresh Air Inlet
4"
2"
1½"

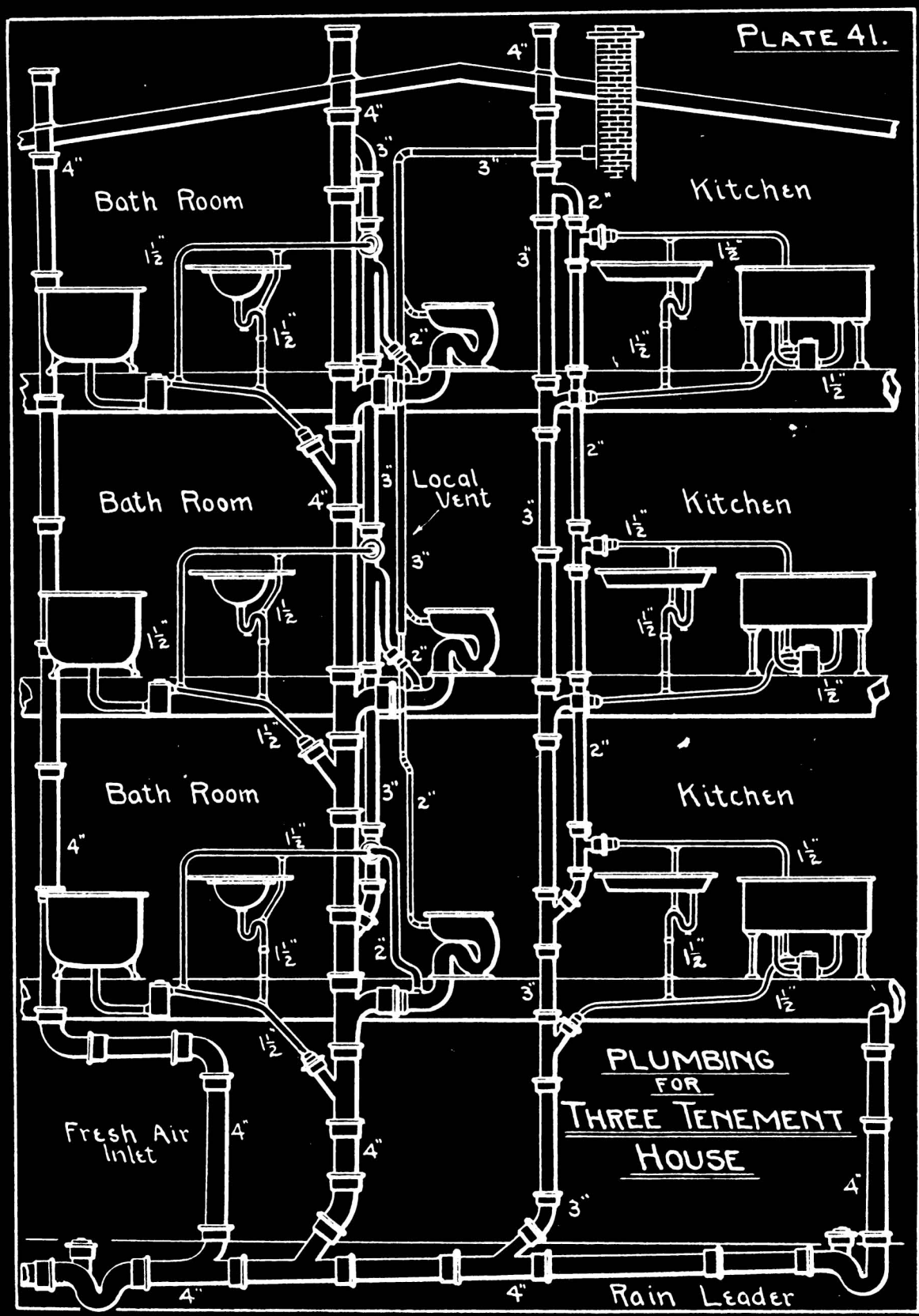


PLATE 41.
Bath Room
Bath Room
Bath Room
Kitchen
Kitchen
Kitchen
Local Vent
Fresh Air Inlet
PLUMBING FOR THREE TENEMENT HOUSE
Rain Leader
4"
3"
2"
1½"

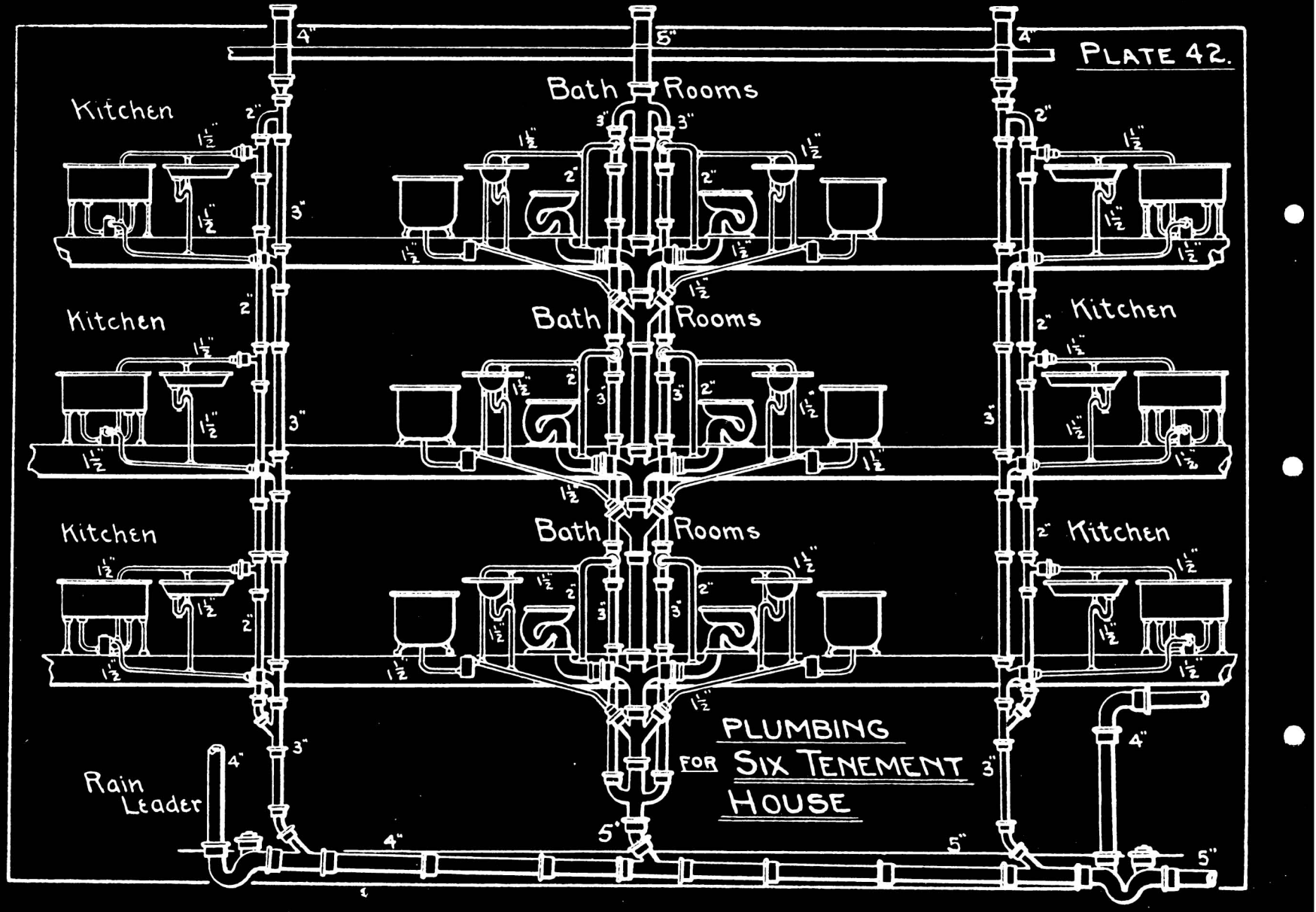
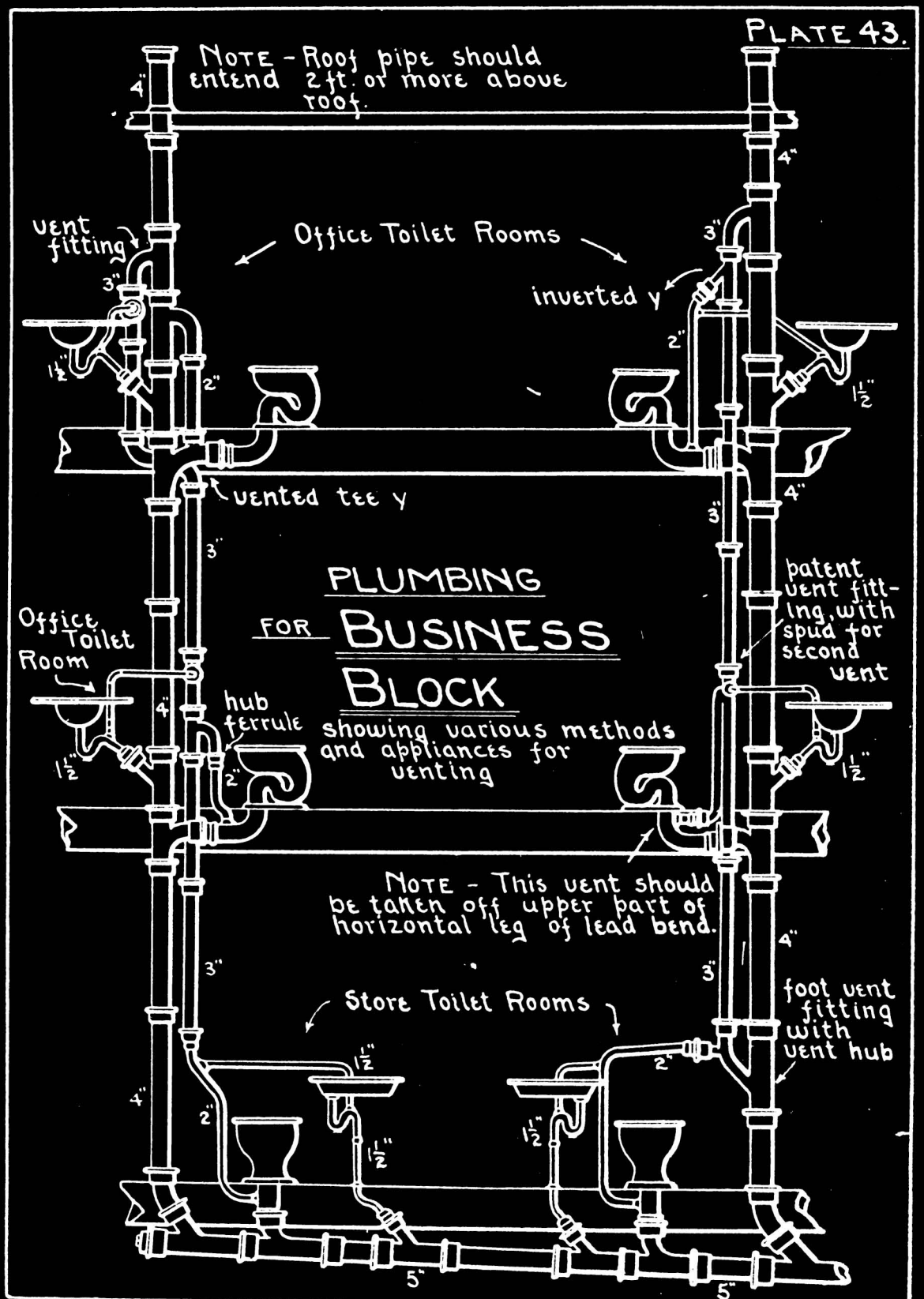


PLATE 42.
Kitchen
Bath Rooms
Kitchen
Kitchen
Bath Rooms
Kitchen
Kitchen
Bath Rooms
Kitchen
Rain Leader
PLUMBING FOR SIX TENEMENT HOUSE

PLATE 43.


NOTE - Roof pipe should extend 2 ft. or more above roof.
4"
vent fitting
3"
Office Toilet Rooms
inverted y
3"
2"
1½"
1½"
2"
vented tee y
4"
3"
3"
PLUMBING
FOR BUSINESS
BLOCK
showing various methods and appliances for venting
patent vent fitting, with spud for second vent
Office Toilet Room
hub ferrule
4"
1½"
2"
1½"
NOTE - This vent should be taken off upper part of horizontal leg of lead bend.
4"
3"
3"
Store Toilet Rooms
foot vent fitting with vent hub
1½"
2"
4"
2"
1½"
1½"
5"
5"

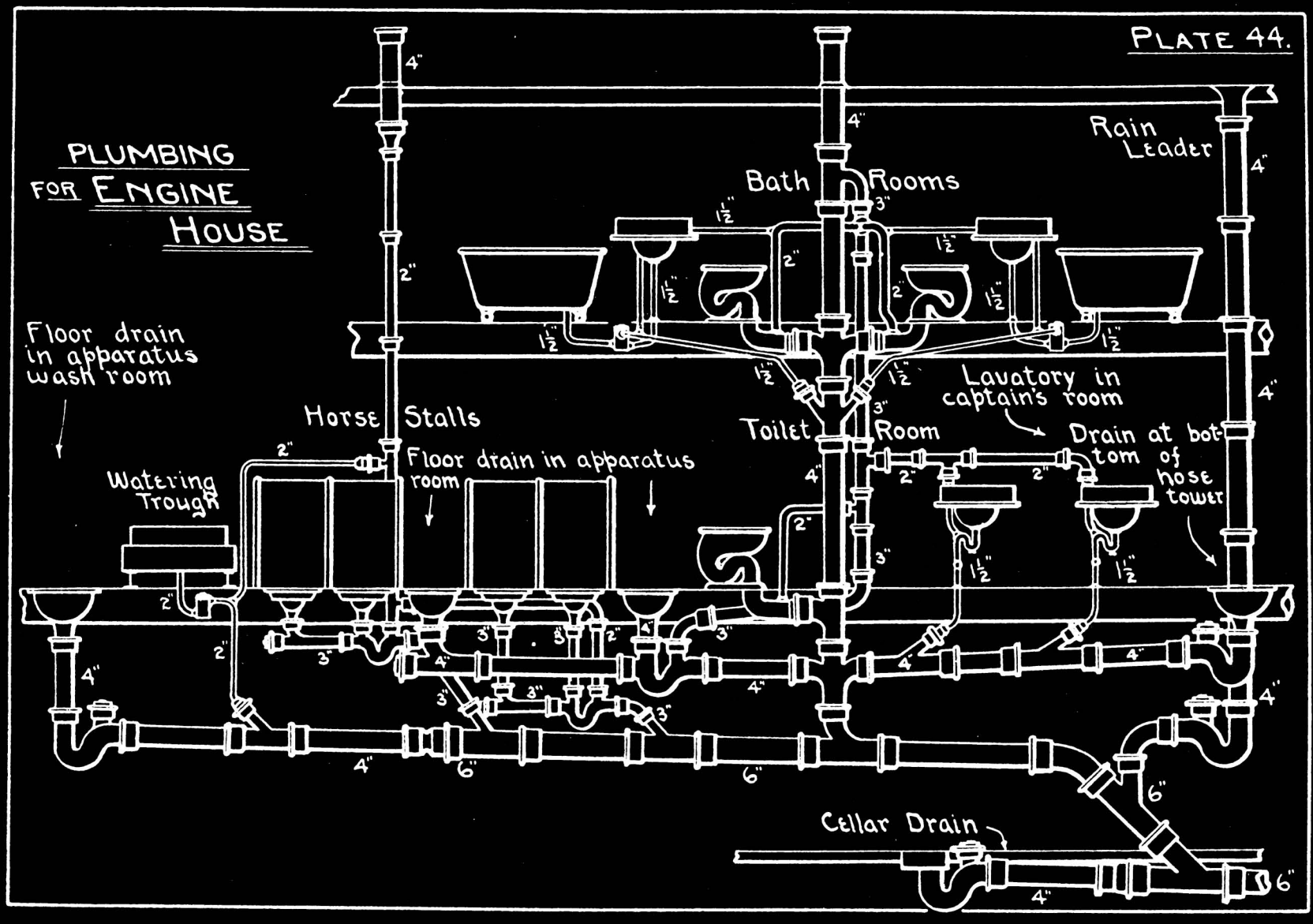
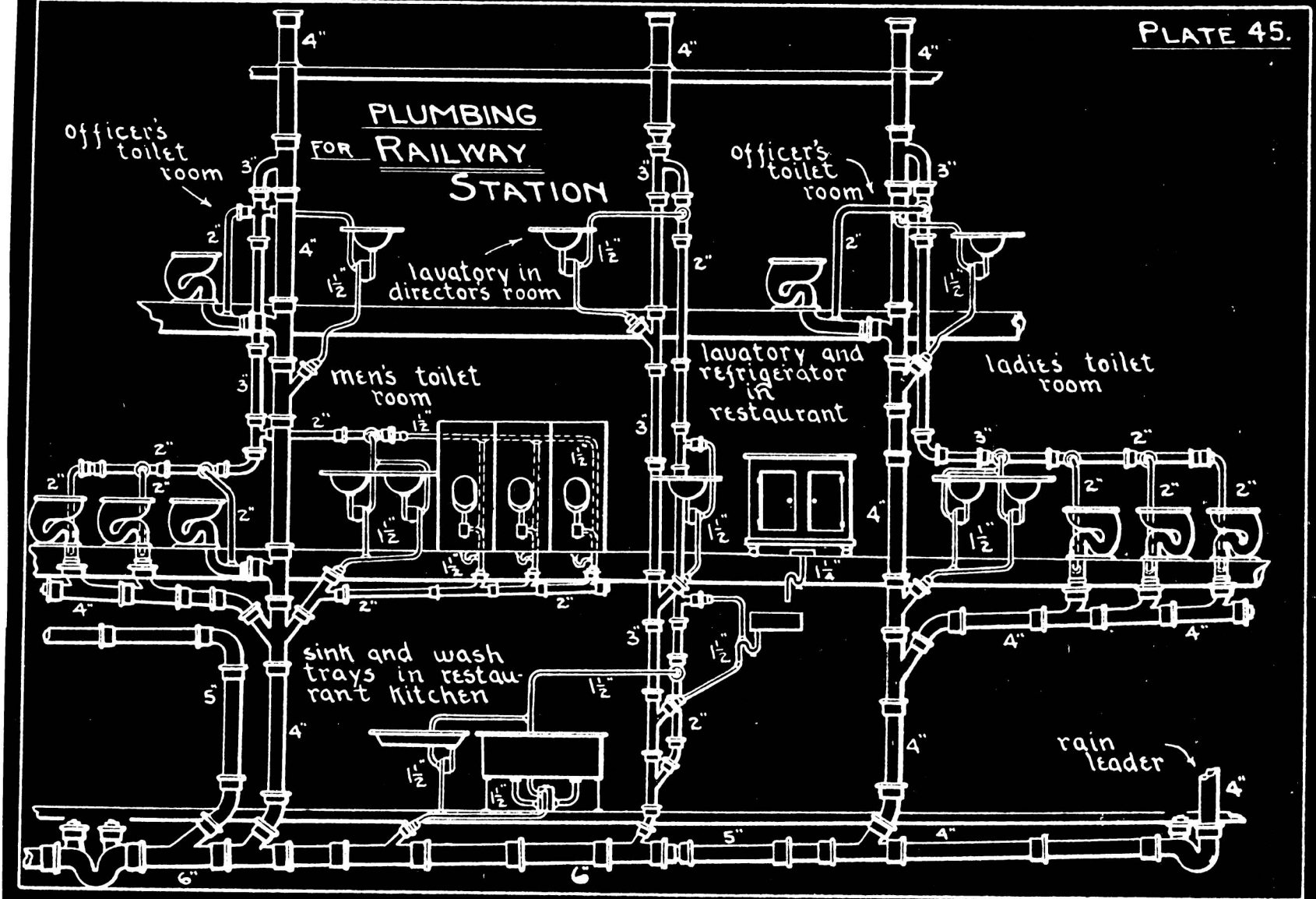


PLATE 44.
PLUMBING FOR ENGINE HOUSE
Floor drain in apparatus wash room
Watering Trough
Horse Stalls
Floor drain in apparatus room
Bath Rooms
Toilet Room
Lavatory in captain's room
Drain at bottom of hose tower
Rain Leader
Cellar Drain
4"
2"
3"
1½"
6"

PLATE 45.

PLUMBING FOR RAILWAY STATION



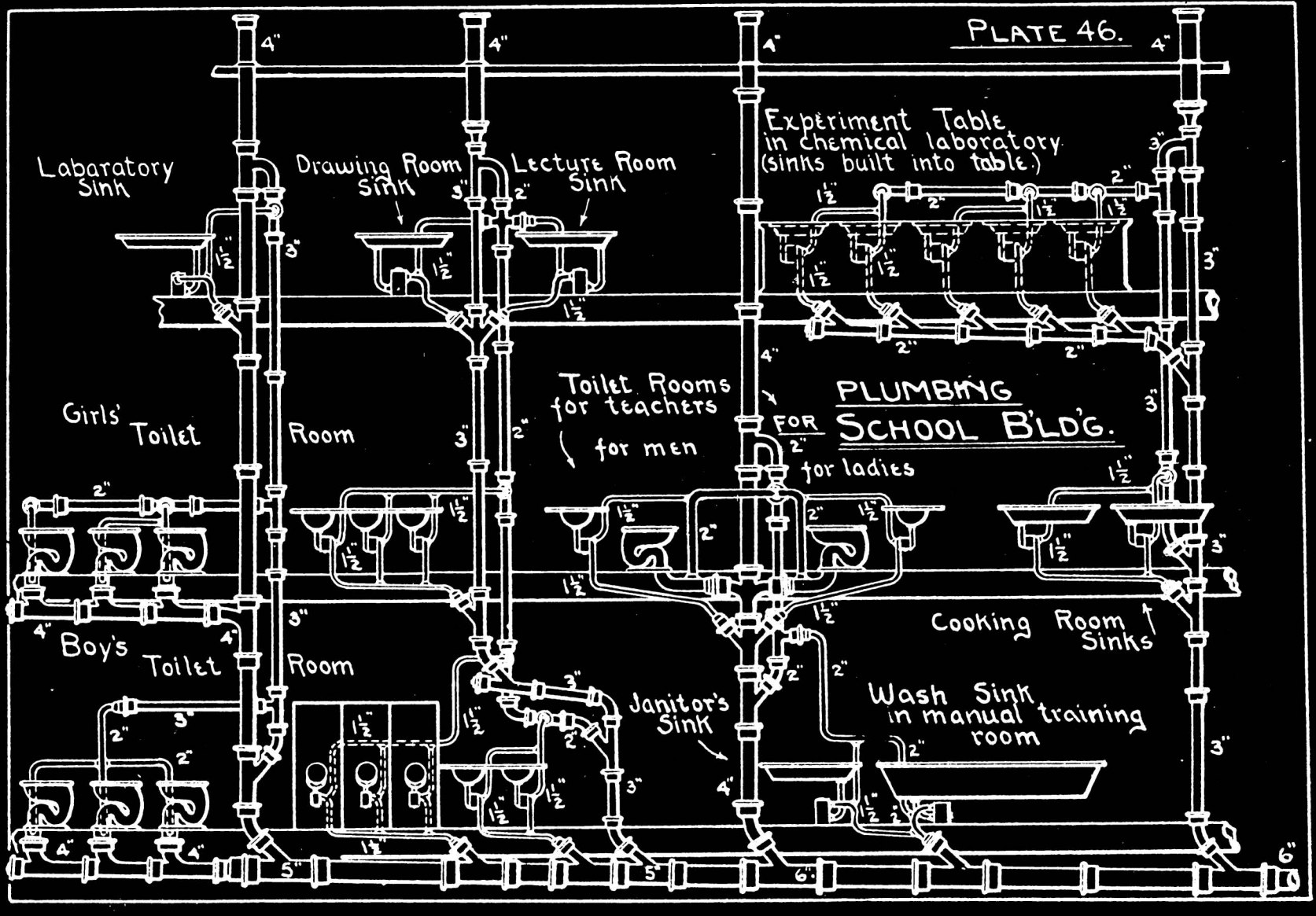


PLATE 46.
PLUMBING
FOR
SCHOOL B'LD'G.
Labaratory Sink
Drawing Room Sink
Lecture Room Sink
Experiment Table in chemical laboratory (sinks built into table.)
Girls' Toilet Room
Toilet Rooms for teachers
for men
for ladies
Boy's Toilet Room
Janitor's Sink
Cooking Room Sinks
Wash Sink in manual training room
4"
3"
2"
1½"
5"
6"

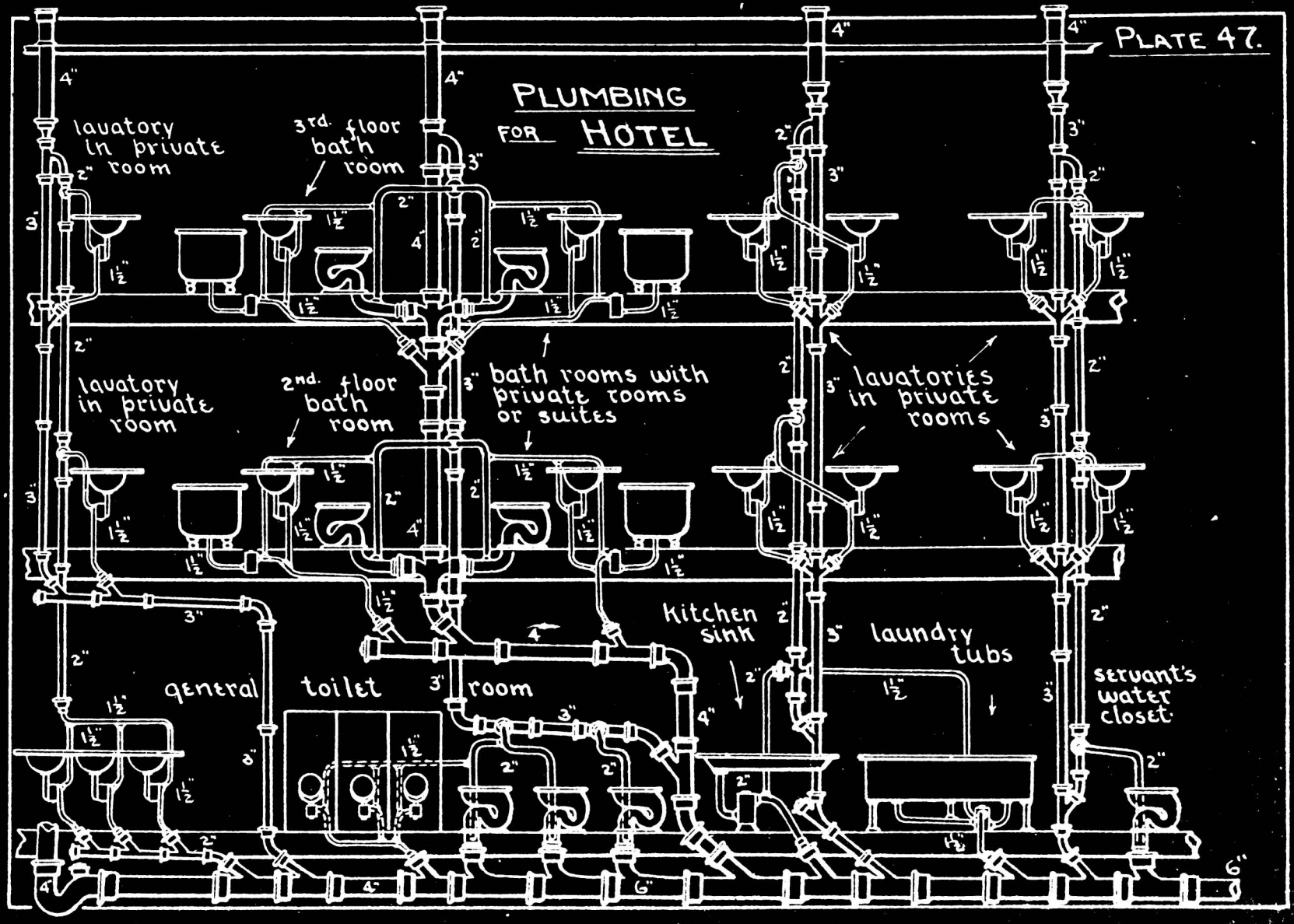


PLATE 47.
PLUMBING FOR HOTEL
lavatory in private room
3rd. floor bath room
lavatory in private room
2nd. floor bath room
bath rooms with private rooms or suites
lavatories in private rooms
Kitchen sink
laundry tubs
general toilet room
servant's water closet
4"
3"
2"
1½"

PLATE 48.

PLUMBING FOR GYMNASIUM

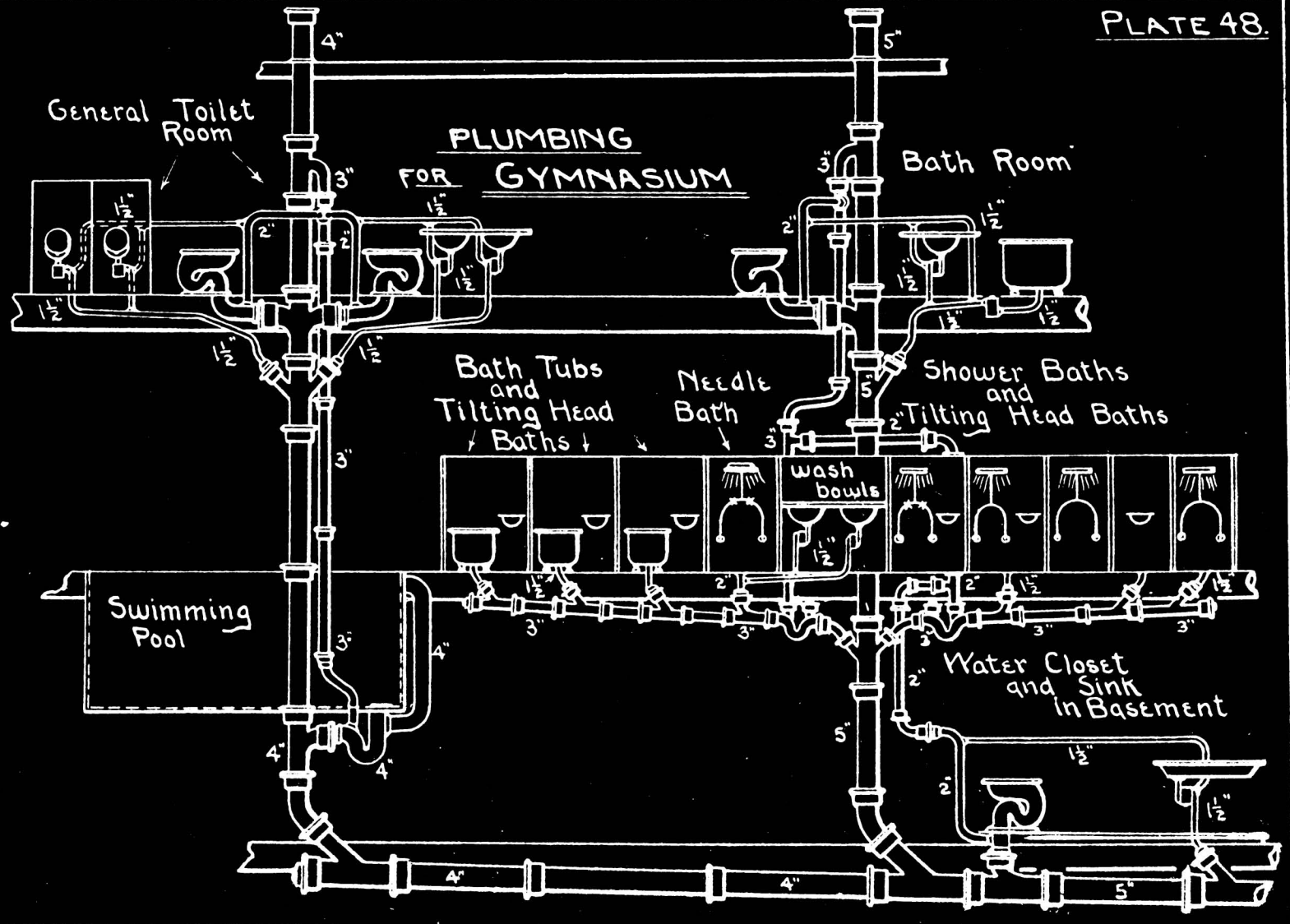
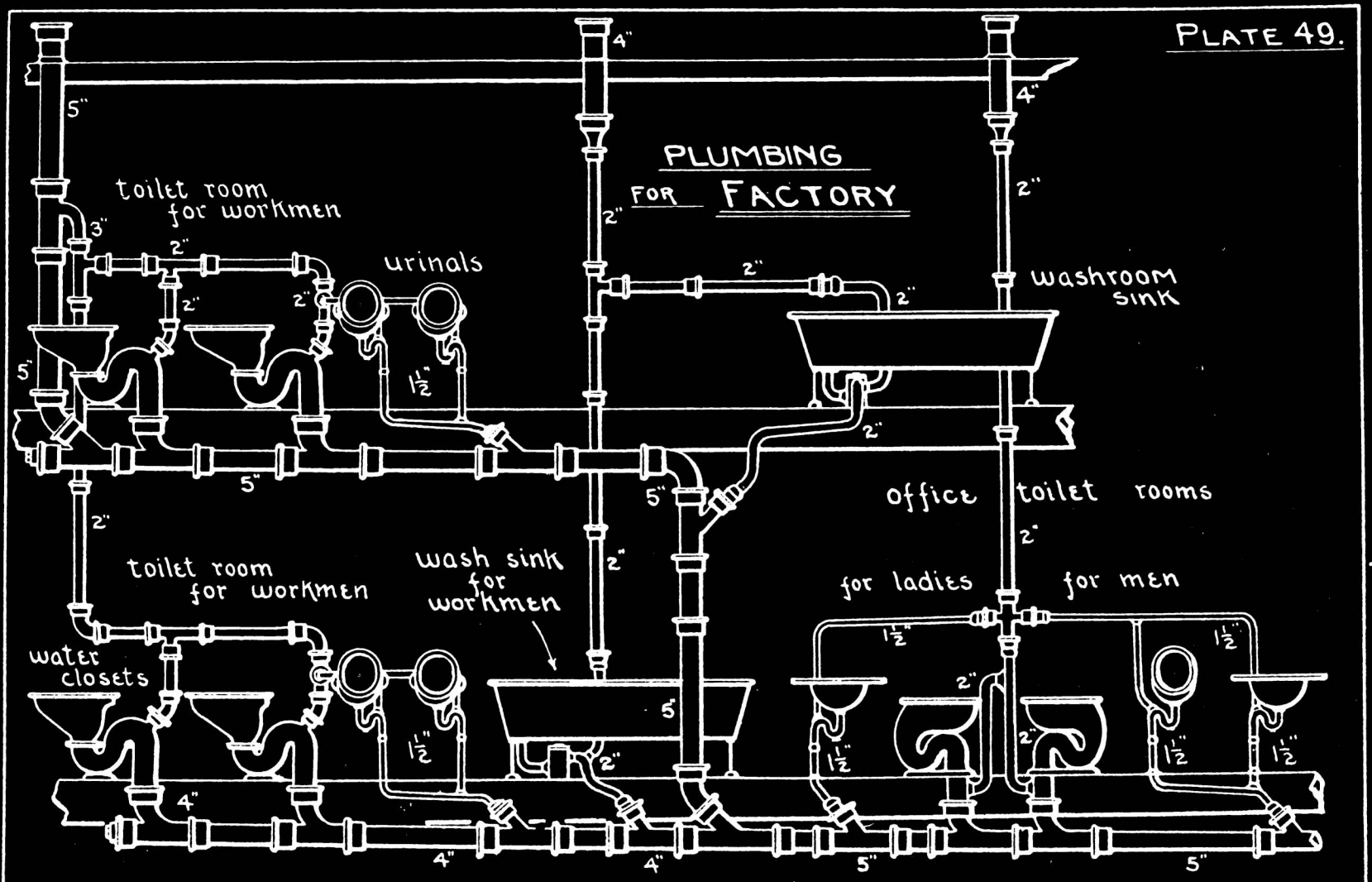
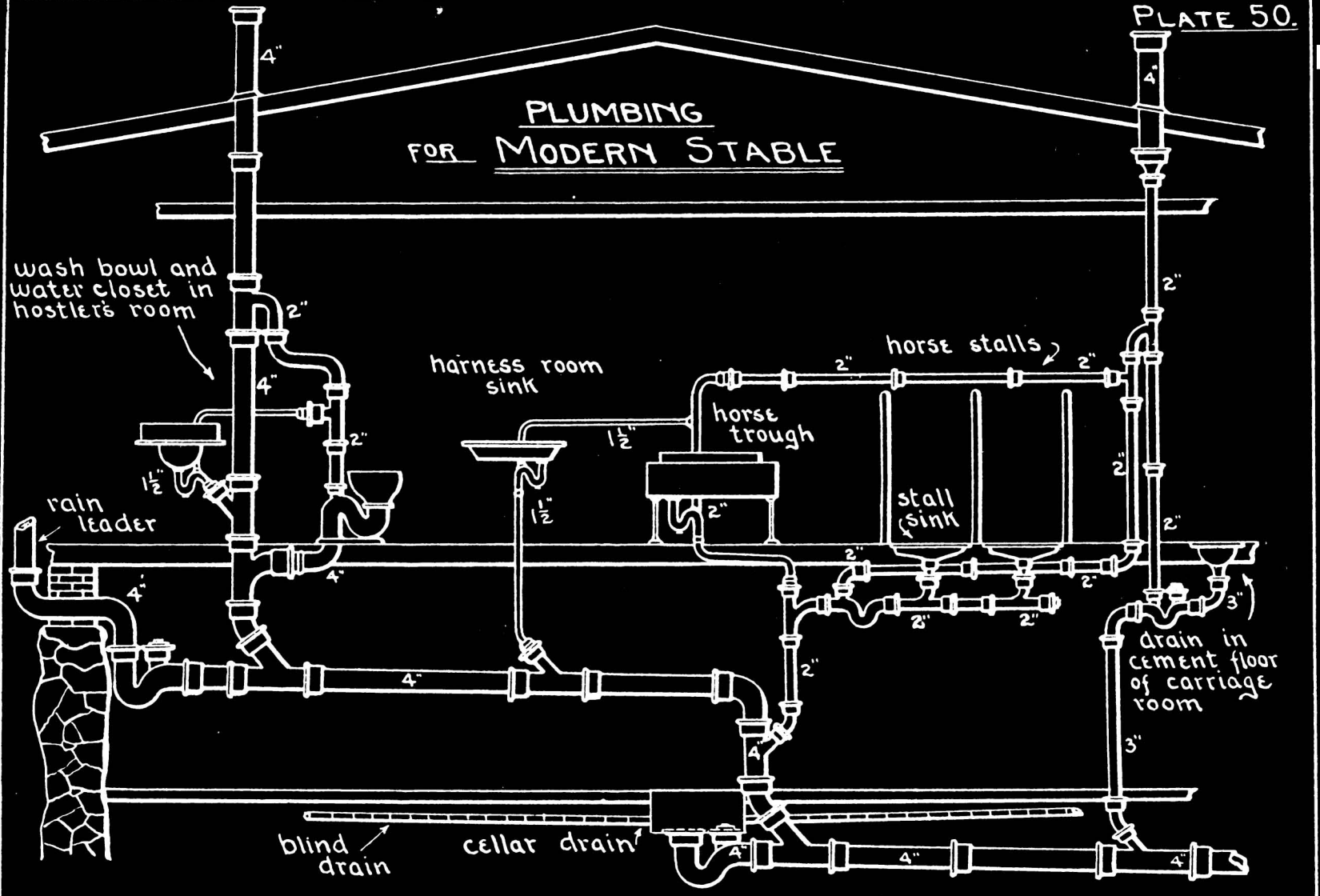
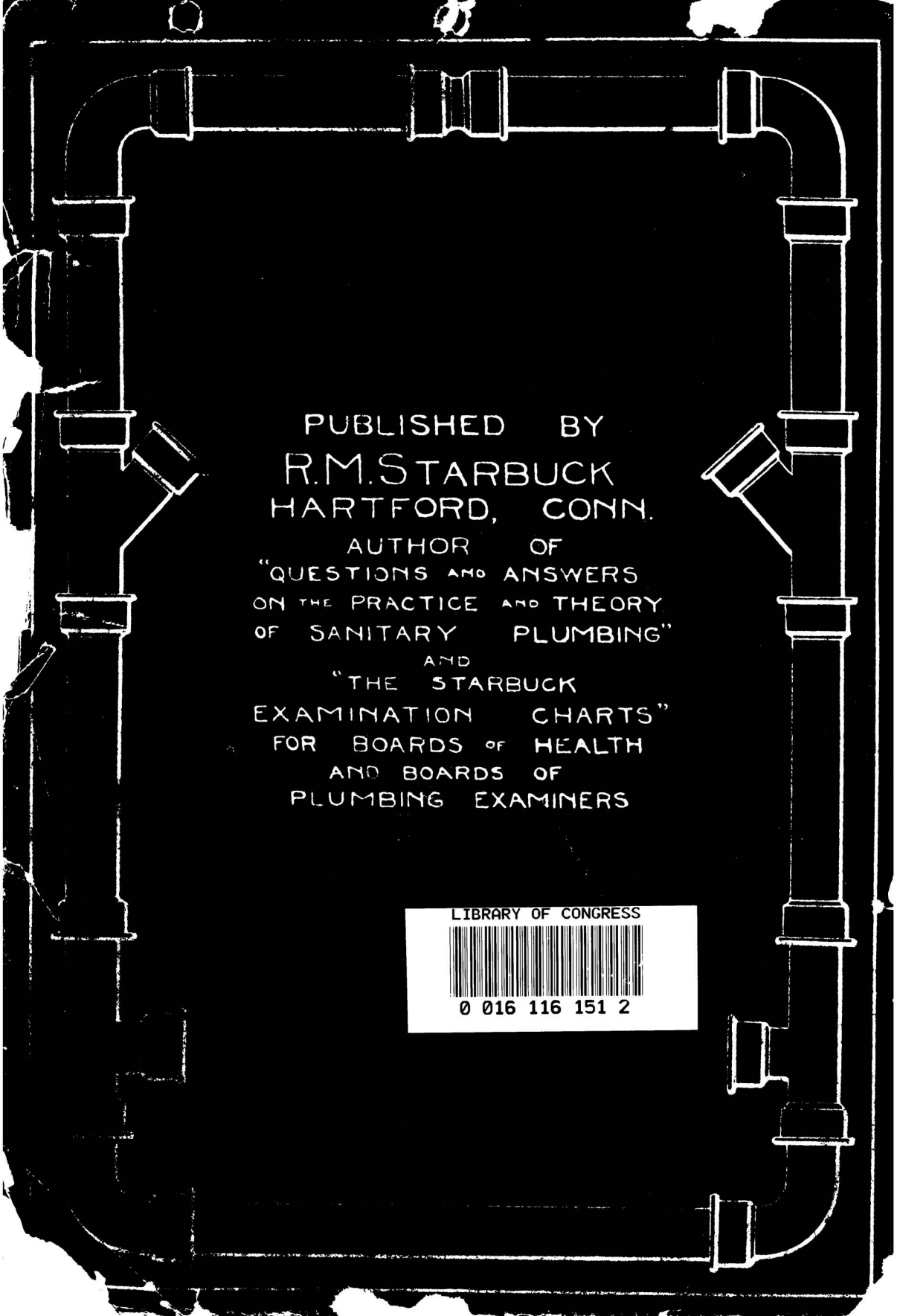


PLATE 49.


PLUMBING
FOR FACTORY
toilet room for workmen
urinals
washroom sink
toilet room for workmen
wash sink for workmen
water closets
office toilet rooms
for ladies
for men
4"
5"
3"
2"
1½"

PLUMBING FOR MODERN STABLE





PUBLISHED BY

R.M.STARBUCK

HARTFORD, CONN.

AUTHOR OF

"QUESTIONS AND ANSWERS ON THE PRACTICE AND THEORY OF SANITARY PLUMBING"

AND

"THE STARBUCK EXAMINATION CHARTS"

FOR BOARDS OF HEALTH AND BOARDS OF PLUMBING EXAMINERS

LIBRARY OF CONGRESS

0 016 116 151 2