WHAT IS A MAGNETIC NEEDLE;

AND WHY DOES IT TURN ITS NEGATIVE END TOWARD THE NORTH POLE?

These questions have not been answered satisfactorily to profound thinkers. It is known that a certain ore of iron, sometimes called lodestone, is a magnet that will communicate an influence to a steel bar which will, when suspended, cause one end to turn nearly in the direction of the north pole, while the other end points nearly south.

But what is this magnet, and what is the influence communicated to the steel needle? I call it a peculiar kind of condensed electricity, which, when applied to a piece of steel, charges it positively at one end and negatively at the other.

It has been supposed that a large mass of lodestone or magnetic oxide of iron exists about 19½° south of the north pole in the direction of Hudson's Bay; and that to this positive point of attraction the negative end of the needle is drawn.

If that theory is true, the needle would point invariably in that direction from every place in the northern hemisphere, which is not a fact.

It may well be doubted whether there is any such point of central attraction, while it is admitted that there is a general tendency in the needle to point in that direction. Can we find any other influence besides attraction that can and does influence the magnetic needle so as to determine the direction it will point? It is known that two positively charged bodies repel each other,