EXCLUSIVE WAR INFORMATION.

TWENTY-FIFTHYEAR

POPULAR SCIENCE SIFTINGS

THE ILLUSTRATED PENNY MAGAZINE

Vol. XLIX. No. 1,264.

TUESDAY, JAN. 4, 1916.

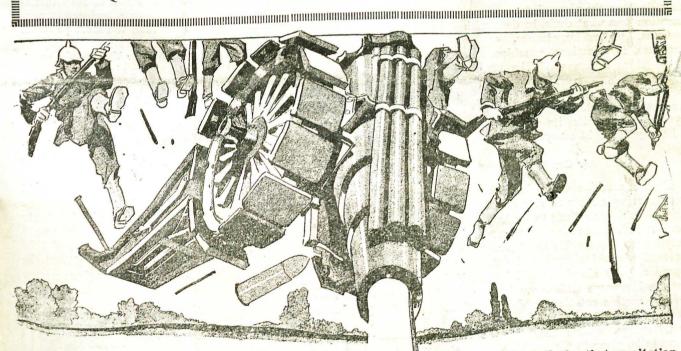
ONE PENNY. Subn. per ann., U.K., 6s. 6d.; Abroad, 7s. 6d.

The greatest triumph that man could achieve over nature would be the mastering, and particularly the neutralising, of the universal force called gravitationthe force that gives weight. This force is at the basis of all our mechanics as well as of the mechanism of the entire universe. No machine would work if there were

to imagine what it was in itself. Yet it is possible, says that distinguished astronomer, Prof. Garratt P. Serviss, that the discovery that baffled Newton is about to fall into our hands This is how he propounds his mighty subject in a recent paper which we quote:

Dr. T. J. J. See, the astronomer, has recently set

CONQUERED GRAVITY TO CONQUER WAR.



no gravitation. The earth could not exist without gravitation. The solar system could not have been created, and could not continue to exist, without gravitation. All the starry systems would go to wrack without it.

Gravitation adapts itself to the greatness or littleness of what it deals with. When it acts upon a feather its force is too slight to be felt by the muscles of a child's finger, but acting between the sun and the earth it exerts a pull equal to the strength of a bar of steel 4,000 miles thick.

The nature of gravitation has always been a mystery. Newton, who discovered the law by which it acts, was unable

forth reasons for believing that gravitation is only another of the many protean forms in which electricity manifests itself. To put his idea in a nutshell it may be said that the force of gravitation is due to electric currents circulating around the atoms of matter, and the amount of gravitative force exerted by a body depends upon the number of such currents, or electric vortexes, that it contains.

This theory brings the ultimate conquest of

[Throughout the War "Science Siftings" will print War Knowledge.]