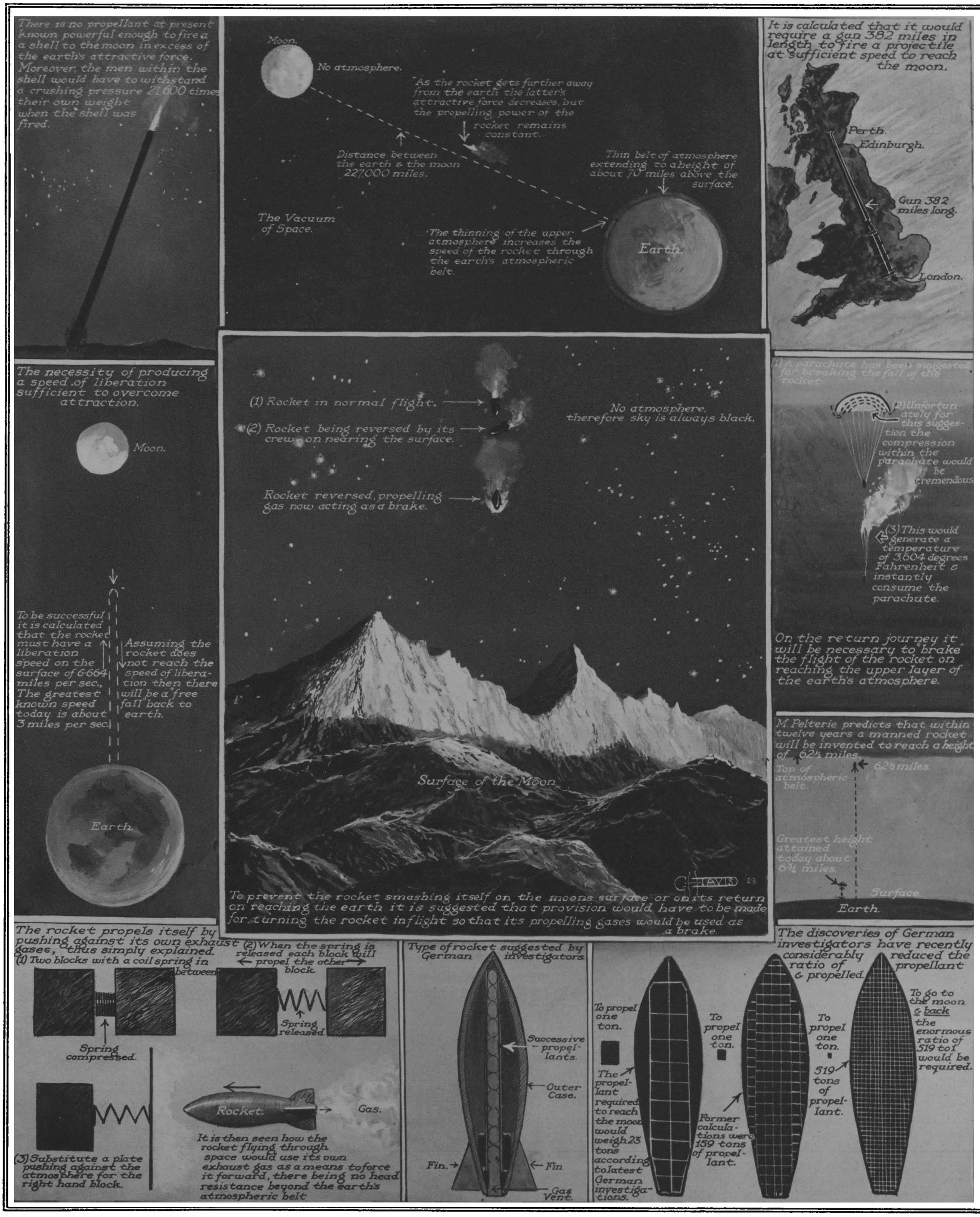
VOYAGING FROM EARTH TO MOON: POSSIBILITIES OF THE ROCKET.

DRAWN BY OUR SPECIAL ARTIST, G. H. DAVIS, FROM INFORMATION SUPPLIED BY M. ROBERT ESNAULT-PELTERIE IN A SPECIAL INTERVIEW. (COPYRIGHTED.)



PROBLEMS TO BE SOLVED BEFORE MAN CAN REACH THE MOON: THE SUBJECT OF A LONDON LECTURE.

Astronautics is a fascinating subject, and dreamers and fiction-writers have for years been imagining the possibilities of inter-planetary communication and a voyage to the moon. M. Robert Esnault-Pelterie, the pioneer aviator and inventor of the "joy-stick" or control-lever used in most aeroplanes to-day, has investigated the scientific possibilities of astronautics. In his recent lecture at the Royal United Service Institution, arranged with the Royal Aero Club, he reduced the whole subject to scientific facts. He at once ruled out the idea of manufacturing a huge gun and firing a shell to the Moon as suggested by Jules Verne. He explained that there was no known propellant capable of hurling a shell in excess of the Earth's attractive force; furthermore, the gun would have to be some 382 miles long, and the human cargo would have to withstand a pressure over twenty-one thousand times their own weight. As an aeroplane could not fly in space where no atmosphere exists to support it, there remains the rocket, and it is to the rocket that scientific investigators at present pin their faith; but he suggests that probably nothing can be really effected or the problem solved until man has chained the power of the atom to his will. To encourage scientific investigation, the Société Astronomique de France are offering a prize of 5000 francs this year, next year, and in 1930, for the best original scientific work which tends towards the solution of the problem of inter-planetary navigation. Already German investigators have produced a large, highly technical book on the subject, and Herr Opel in Germany is experimenting with rocket-propelled cars and aeroplanes. As a result of these investigations, the force of the propellant required to propel a certain weight in excess of the earth's attraction and gravity has been considerably reduced.