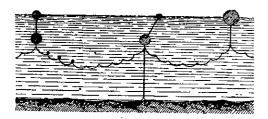
"A man so universal that he seemed to be all science's epitome." Such a paraphrase of a famous verse might fairly stand for the description of the position attained in the scientific world by the late Lord Kelvin, so difficult it is to decide where he was really pre-eminent. At the outset of his career his teeming brain seemed to press him into the study of the whole range of scientific discovery. In his early twenties he was an astronomer, and even a musician, and, if we may judge by analogy where there is no direct evidence of proficiency, it seems certain that he was on the high road to eminence in both these regions of human effort so far apart from each other. Would he, one can not help wondering, have rivalled Wagner with&a



THE PROPOSAL OF DESPAIR.

stately series of symphonies, or the Herschels in closeness of observation, or the achievements of Newton and Laplace and the other great men? The question is, of course, bootless. But one can say safely that with his mathematical instinct for accuracy, his marvellous sense of order, his untiring industry, and his never-failing inspiration he must have made a prodigious mark. Many things have been said of him, but of these none were truer than the saying that he possessed all the qualities which are necessary to convert ingenuity into genius.

Recognising early that some unit must be set to the field of his activity, Professor Thomson turned from the last-named pursuits, concentrating his mind on the practical field open to his boundless enterprise. He had attained to his position early through his proficiency in mathematics, graduating, like many other great men before him, as second wrangler of Cambridge University. Prominent among these may be mentioned Clerk-Maxwell and Clifford, who with him made the three best mathematicians produced in the British Isles during the last century. To the soundness of his mathematical knowledge and the close rigour of his mathematical training were no doubt due the extraordinary skill to which Thomson attained in after years as an inventor. It was this skill in the minutest details which built up the value of his patents. The wealth

The late Lord Kelvin

A GREAT CAREER.

Part I.-

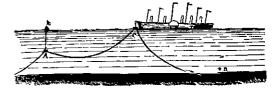
they brought him, directly and indirectly, may be gauged by the fact that his will was proved the other day for nearly a million of sterling value. Unlike many men of his genius the professor carried his genius with him into the region of business; a fact to be estimated by his position at the head of several firms, notably the Kelvin Company, of Glasgow. Some of these were established to manufacture the various articles of his invention, such as the compass, the deep-sea sounder, the galvanometer, the numerous dynamometers, ampere meters, volt meters, watt meters, and the rest; while others were concerned with their distribution throughout the various markets of the world. One can easily picture the veteran, who had watched the paying out of the first Atlantic cable by the light of instruments of his own invention, presiding also at the meetings of the directors whose business it was to regulate manufacture and distribution, and we may declare without fear of contradiction that the value of his originality, shrewdness, and method told their tale in the one department as they had done in the other.

It was not by cheese-paring that he made that large fortune above alluded to, for he enjoyed life in expensive fashion. His mansion at Gilmore Hill, Clasgow, was one of the finest of the western suburbs of that city, and he kept a yacht in which he entertained often a large and distinguished company, and made voyages not confined to the magnificent waters of Scotland and the British Isles generally, but extending to the Norway fiords and the more distant Mediterranean.

Mention of these aquatic tastes recalls the fact that Thomson, during his career as a student, attained to emmence in athletics. As well as on the intellectual side, becoming so distinguished that he carried off at Cambridge on one occasion the much coveted "Silver Sculls."

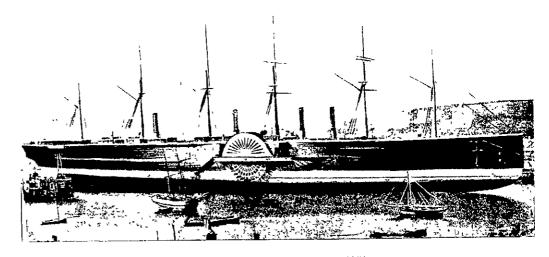
. It was an example which justifies the decision of Cecil Rhodes to insist upon allround excellence—both physical and mental—in the scholars holding his now famous and much-sought scholarships. There is a further justification in the wonderful success of the career that followed the combination of "silver sculls" and second wranglership.

A biographer said of him: -- "Intense intellectual activity and physicial energy have characterised his whole career. At seventeen he had commenced his career of discovery, at twenty-two he was Professor of Natural Philosophy in the University of Glasgow, in 1866 he was knighted for his distinguished services(at forty-two) in connection with the Atlantic telegraph. The highest honours academical were heaped upon him-he was the first scientific man to be raised to the peerage—his name is co-extensive with the whole range of electrical science and molecular physics. No physical question seems too large or too profound for his grasp of intellect. He has estimated the size of atoms and the probable age of the world's meturity. His theory of the dissipation of universal energy is comparable with Newton's theory



THE FINAL SUCCESS, AFTER 33 ATTEMPTS AT RECOVERY.

of gravitation, in the largeness of its generalisation, that all motion tends to become heat, and to diffuse itself uniformly. His 'Natural Philosophy' is a monument of dynamical learning, in part the work of Professor Tait, his Edinburgh colleague. His name meets one on almost every page of works on electricity and thermodynamics. In telegraphy his name is a household word. At the remotest stations on the earth's surface his beautiful instruments are to be seen in play. flashing out the message from the ocean. At a recent loan exhibition, his case of electrometers, his tide-calculating machine, his improved compass, his pianoforte apparatus for sounding the dccp sea, testify to the range and quality of his inventive genius. Ir America his fame is as great as it is at home." One has but to add that the sum of these achievements in money represents a million sterling to completely realise the appealing power of the great example of physical and



THE GREAT EASTERN, BUILT IN 1858.

Used for cable-laying purposes. For this work one set of boilers and one funnel between fourth and fifth masts, were removed.