THE LATE JOSEPH H. KILLEY.

A PROMINENT citizen of Hamilton and a well known engineer passed away on August 10th, in the person of Mr. Joseph H. Killey.

Deceased was born in Castletown, Isle of Man, on April 24th, 1827. From his earliest years he had a great love of machinery. His parents purchased for him the work "Lardner on the Steam Engine," and this he mastered before he was twelve years old. At the age of fourteen he constructed a crude model engine and boiler. He went to Liverpool to learn the foundry business, and after five years entered the Vulcan Iron Works, owned by a cousin of the late W. E. Gladstone. Mr. Killey afterwards became foreman of a large foundry, and later mechanical manager and partner in the Windsor Machine Works, near Liverpool. In 1864 he came to Canada, obtaining employment with F. G. Beckett & Co., of Hamilton, and later became foreman of the St. Lawrence Foundry Co., Toronto. Then he was appointed engineer of the steamer Rothesay Castle, afterwards becoming engineer of the gunboat Prince Albert. After serving for three years on this boat, he built an oscillating and marine engine and boiler for the composite steamer Adelaide Horton.

Mr. Killey then established a business in a small way in the city of Hamilton, but it gradually increased to an important engine building concern. In 1870 the business was conducted under the name of J. H. Killey & Co., and in 1884 it became the Osborne-Killey Co. For some years after the winding up of this company he was associated with the late F. G. Beckett as the Killey-Beckett Co., manufacturing engines on a somewhat large scale. Among the machinery constructed by Mr. Killey were the pumping engines at Hamilton beach and the engine at the Asylum. For the past five years he has not been engaged in active business.

ELECTRICAL APPARATUS FOR WINDSOR CASTLE.

For the purpose of showing how cheap notoriety may be obtained. Fire and Water gives the true inwardness of the case out of which arose the statement recently published broadcast in the press that the order for electrical apparatus to be installed in Windsor Castle had been given to an American firm. The real facts of the case are these: A London firm received a contract for putting in a regular domicile electric fire alarm system in that royal residence. The boxes, wire, and special appliances for such work can be obtained at any electrical suppy house in almost any large city in this country or in European countries. From the fact, however, that through American ingenuity and machinery, goods of this kind can be made here and imported at a lower price than they can be purchased in England, the London firm in question decided to order from us. A Connecticut firm, which makes a cheap line of electrical goods, received an order for small bells and boxes, while the Gamewell Fire Alarm Company, of New York, was asked to furnish its special instruments, and another New York firm was patronized to a small extent to complete the order. There was no competition for the work on this side of the Atlantic, whatever there may have been in London, so the orders were distributed by the contractors as stated above. Of course, the fact that Her Majesty's principal home was to be equipped with American goods led the Connecticut firm to derive as much newspaper notoriety and free advertising as possible; and that it succeeded is very much to its credit as a clever stroke of business. The amusing part of the story is that those who had orders for the expensive patented instruments to be used in the installation were not referred to at all in the newepaper paragraph, and the amount of the order was not stated as being in the aggregate not more than \$2,000.

THE LARGEST INCANDESCENT LAMP EVER MADE.

It would seem at first sight ridiculous to construct incandescent lamps of a candle power comparable with that of arc lights, owing to the superior economy of the latter, but for one particular purpose the incandescent lamp is far preferable. That purpose is light-house illumination, in which the superiority of the incandescent is its greater fog penetration, the yellower rays of the glowing filament being dampened out and absorbed to a much less extent than the rays of an arc light. The Bryan-Marsh Company has on this account been experimenting on large lamps, the largest of which



A 5000 C. P. INCANDESCENT LAMP.

is one nominally of 5000 candle power, which was exhibited at the Electrical Show, and the magnitude of which can be judged from the accompanying reproduction of a photograph which is reprinted from the "lmperial Lamp Gazette." The lamp is of the standard double-filament type like the smaller Imperial lamps, the two filaments being in parallel with each other and each taking the full 236 volts. The economy was about 3 watts per candle, the total consumption of power being, therefore, some 15 kilowatts, requiring a current strength of over 60 amperes. The lamp was exhibited but three nights when it burnt out, owing probably to the intense heat to which the glass of the neck of the bulb was subjected. Owing to the fear that the filament would droop, the lamp hung in a position the reverse of that shown in the illustration, and the heat was very intense at the base, probably softening the glass, which then collapsed due to atmospheric pres-A larger bulb in an upright position would eliminate this difficulty. The cost of construction and erection of this single lamp was over \$1000.