

A Visit to the Eddystone Lighthouse.

By F. G. KITTON.

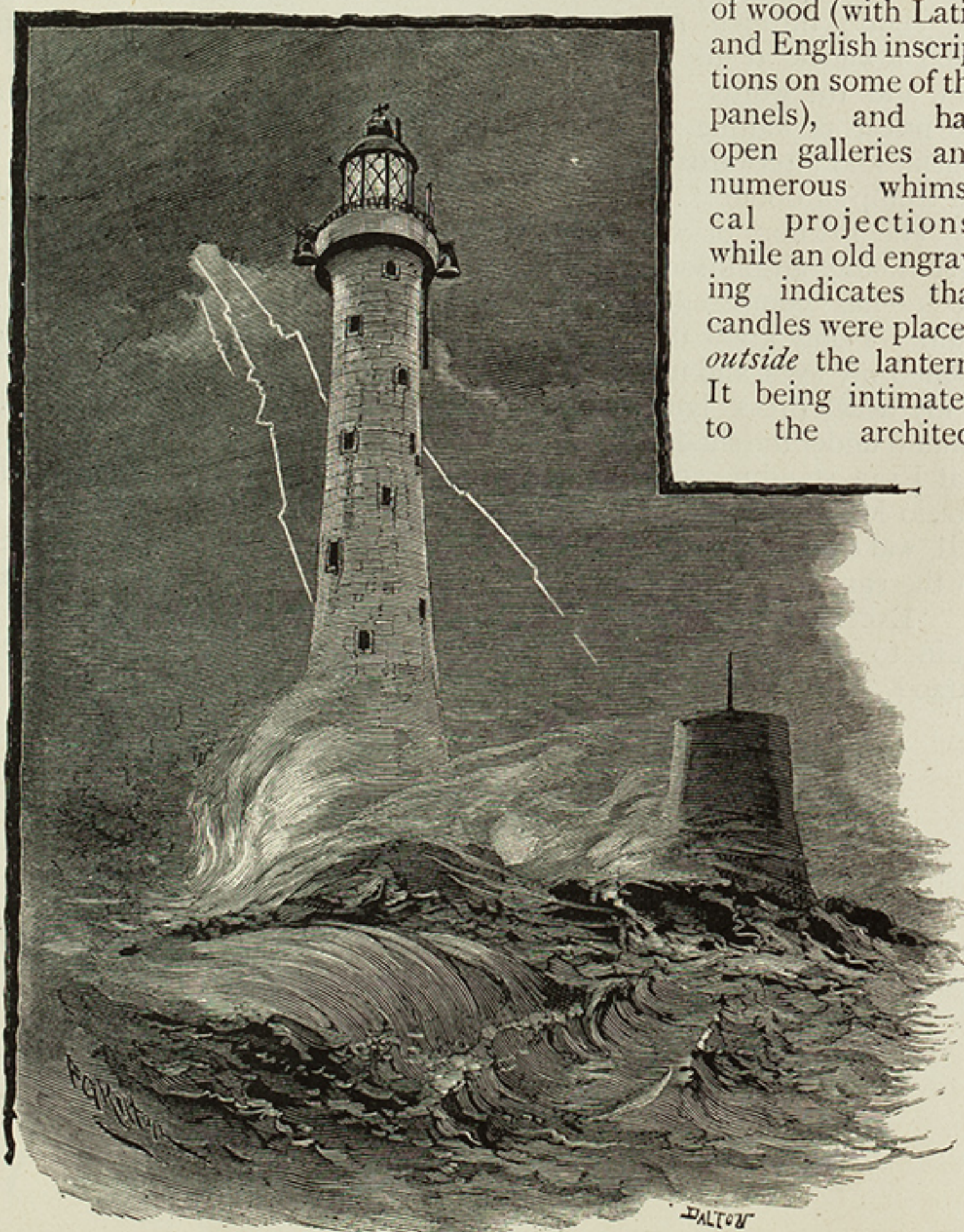


F all lighthouses that surround our coast the most familiar is the noble structure which proudly rears its head above the dangerous Eddystone rock. The story of that interesting building and its predecessors on this extensive reef is enhanced by a touch of romance which makes it worth the telling, and is deserving of record if only as an illustration of man's perseverance, and of his determination to overcome almost insuperable difficulties. Everyone knows that the present lighthouse was preceded by those to which I shall briefly allude, but it is not common knowledge that the earliest intimation (to be found in contemporary records) of a lighthouse on the Eddystone dates back as far as 1664, when (says a writer in the *Morning Post*) the proposal was made by Sir John Coryton and Henry Brunker, but nothing further has transpired regarding the scheme.

The first lighthouse was built by Henry Winstanley, an Essex gentleman, whose eccentricities were combined with great mechanical ingenuity, who began his difficult task in 1696, and completed it four years later. It was a wooden structure of the most fantastic kind, entrance to the various rooms being obtained by means of external ladders. Beneath the lantern (which was surmounted by a huge vane, supported by ornamental scroll work) was a dome or cupola resting on an open arcade with a gallery, and under the latter were the living

and store rooms. This quaint design is preserved in the form of a large silver model of contemporary workmanship, which once formed part of the well-known Morgan collection of family plate; it was intended to serve as a table ornament, or for use as a salt-cellar and spice-box, and is curious as being probably the only accurate model in silver of a structure of any kind.

Soon after Winstanley completed this lighthouse he discovered that it was not substantial enough to withstand violent storms and the fury of the waves, and he therefore altered it considerably, the second design being much more ornate in character; the tower was partly circular and partly polygonal, was mainly constructed of wood (with Latin and English inscriptions on some of the panels), and had open galleries and numerous whimsical projections, while an old engraving indicates that candles were placed *outside* the lantern. It being intimated to the architect



THE EDDYSTONE LIGHTHOUSE—STORM.

(one day during the progress of the alterations) that the lighthouse would certainly be over-set, he (feeling so well assured of its stability) replied that he should only wish to be there in the greatest storm that ever blew, in order to see its effect upon the structure. His wish was gratified, for a dreadful tempest raged in 1703, while he and his workmen and light-keepers were in the building, which carried away the lighthouse and its inmates, and all perished in the sea, the only sign remaining being the larger irons whereby the work was fixed to the rock. It is very remarkable that at the same time this catastrophe happened the model of the lighthouse at Winstanley's residence in Essex fell down and was broken to pieces.

It being absolutely necessary, as navigation increased, that a guiding light should be maintained upon this reef so fraught with danger to mariners, it was decided to construct a second lighthouse, and in 1706 John Rudyerd (a common labourer's son, who rose to the position of a silk mercer on Ludgate Hill) commenced to build one of wood upon a stone and timber foundation, the general design—a cone-shaped column—being much more appropriate.

Louis XIV. was then at war with England, and in addition to the natural difficulties with which the workmen engaged upon the building had to contend, was the constant apprehension of being taken prisoners by French privateers who infested the coast; indeed, some of the men employed by Winstanley were thus carried off to France, but immediately released by order of the French King, because the work they were executing was one for universal good, his Majesty explaining that "he was at war with England, and not with humanity." Rudyerd's lighthouse successfully resisted the elements for more than forty years, but in 1755 it was burned down, the fire originating in the lantern. In connection with this unfortunate disaster a strange incident is recorded and duly authenticated. During the conflagration one of the

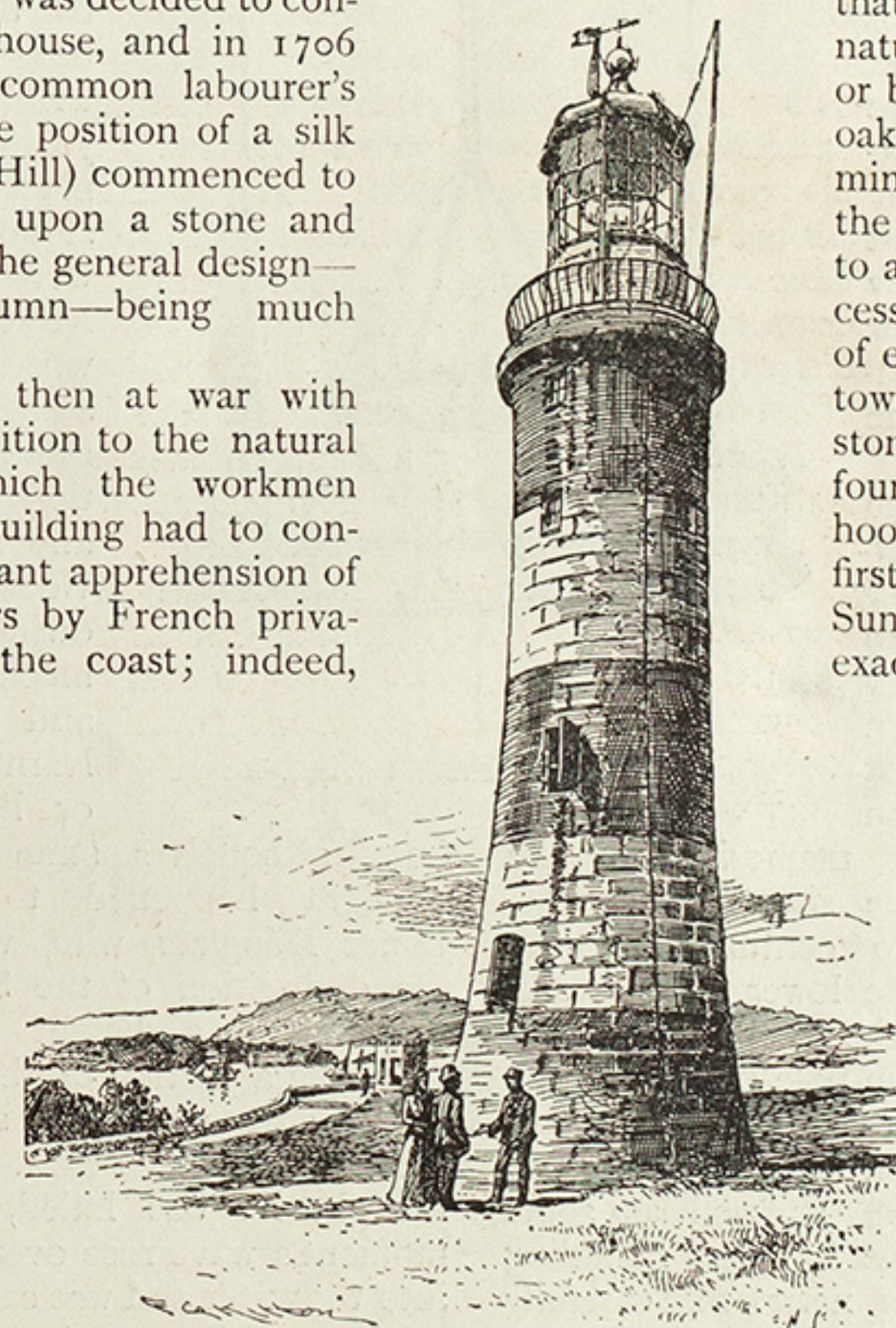
men, on looking upward to watch the effect of the water thrown upon the flames, received upon his person a copious shower of lead, some of which entered his throat; but, curious to relate, he survived the painful experience many years, and when he died a solid piece of lead weighing over seven ounces was found in his body!

With the third Eddystone lighthouse is associated the more familiar name of John Smeaton, who, in 1759, completed a tower entirely of stone, which was considered at the time as one of the wonders of the world. This famous engineer's description of the building of his lighthouse (contained in a large folio volume, published in 1791, and dedicated to the King) is most circumstantial, and with the aid of the illustrations the reader may easily comprehend the enormous difficulty of the undertaking. The form he adopted was

that presented by the natural figure of the waist or bole of a large spreading oak, which suggested to his mind the shape a column of the greatest stability ought to assume in order to successfully resist the action of external violence. The tower was built of moor-stone (the true granite), found in the neighbourhood of Plymouth, and the first block was laid on a Sunday in June, 1757, the exact date being deeply

incised in the stone itself; and after four years' labour upon the rock, hindered by innumerable obstacles and dangers, the lighthouse was satisfactorily completed, without any loss of life or limb, or accident by which the work could be said to be materially retarded. Every stone was ingeniously dovetailed to its neigh-

bour, and so substantial was the whole structure that the most violent storms had no effect upon it, although the waves would frequently enwrap the tower like a sheet, rising at times to double its height, and totally hiding it from view. In 1762 there raged a



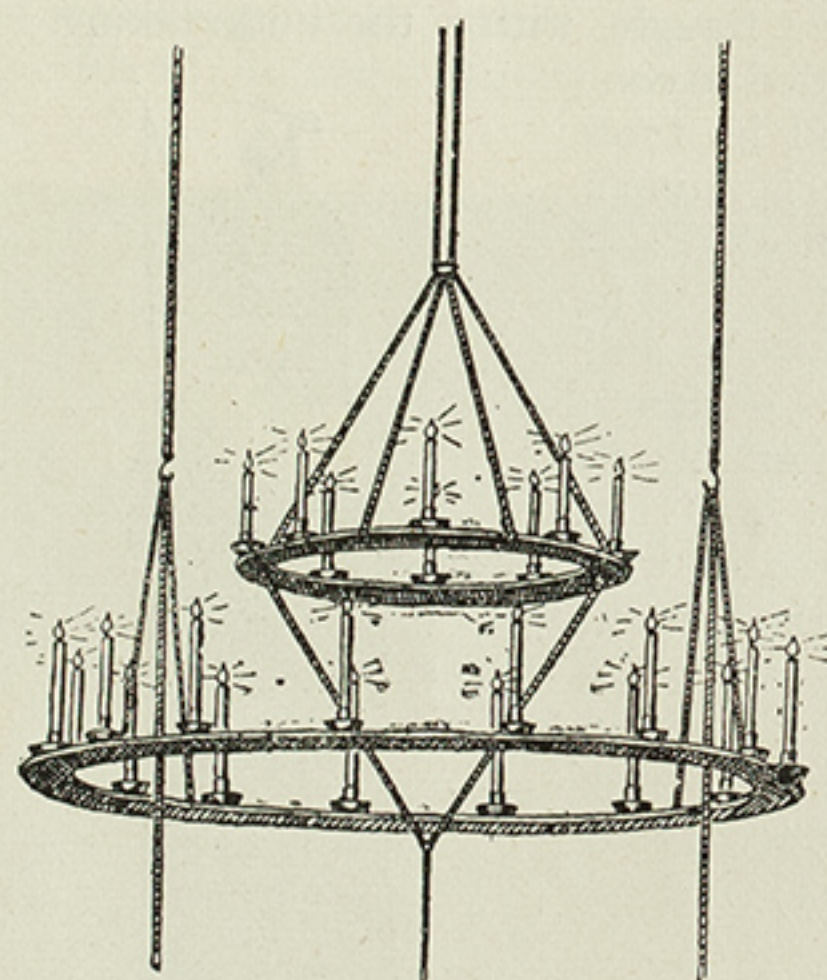
SMEATON'S LIGHTHOUSE—ON PLYMOUTH HOE.

tempest so severe that those who had ventured to predict the downfall of Smeaton's tower were heard to say, when the storm ceased, that "if the Eddystone Lighthouse is now standing, it will stand to the Day of Judgment."

Smeaton himself, although conscious of the strength of his great work, was sometimes anxious for its safety, and often he might have been seen in the early grey of the morning, standing on Plymouth Hoe, gazing with his telescope in the direction of the rock—his sole thought being of his lighthouse. Smeaton's tower would be marking the reef to-day but for the fact that the sea had gradually undermined the rock upon which it stood, to such an extent that the oscillation of the building became so alarming as to render it unsafe.

It was accordingly abandoned, and in 1877 it was decided to erect a new lighthouse, more commodious and comfortable than the old one, the result being the present structure, designed by Mr. James (afterwards Sir James) N. Douglass, engineer-in-chief of the Trinity House.

Before relinquishing the subject of Smeaton's lighthouse it is desirable to explain that, after the completion of the new one, it was taken down to the level of the first room and re-erected on



SMEATON'S CHANDELIER, 1759.

Plymouth Hoe, as a memorial to the great engineer, on the site formerly occupied for about two centuries by the Trinity Landmark; the lower portion still remaining intact on the rock, as a distinguishing mark, an iron pole being fixed in its centre. The old tower is now a show-place, so that visitors can inspect the interior of the historic edifice, as well as some portraits and relics of its founder, including a copy of his famous narrative, carefully preserved in a glass case. In the lantern hangs the original chandelier as used in 1759—two circular frames (a large one suspended beneath a smaller) carrying twenty-four wax candles of six to the pound—a method of illumination which, although decidedly primitive in these days, was a great improvement on the old system (fires blazing in open grates and, later, candles

shaded by horn or glass) that had hitherto prevailed.

The present Eddystone Lighthouse, opened in 1882, was completed in three-and-a-half years, and is founded on the actual body of the reef at a distance of forty yards from its predecessor. Sir James Douglass greatly improved upon Smeaton's design in adopting a cylindrical base instead of the curved shaft commencing at the foundation—this base not only preventing the heavy seas from breaking upon the structure, but affording a convenient landing platform—a convenience much appreciated by the keepers. Operations in connection with the Douglass lighthouse were begun in July, 1878, the men during the early stage being compelled to work below the level of low water; and about

twelve months later the foundation stone was laid by the Duke of Edinburgh, Master of the Trinity House, who, two years subsequently, also placed in position the top stone of the tower. The work (says Mr. E. Price Edwards, in his concisely-written volume on the subject) was executed more rapidly in proportion to dimensions than any rock lighthouse previously undertaken, this owing chiefly to superior mechanical contrivances; and it is satisfactory to learn that no loss of life or limb resulted there-

from, although a strange and nearly fatal accident happened to the son of Sir James Douglass, who, while superintending the demolition of the Smeaton tower, was standing at a height of 70ft. above the sea when a portion of the chain guys of the shears gave way, and, striking him, hurled him to the rocks below. All his colleagues thought he was killed, but at the critical moment a wave rose over the rock, and he fell into the water and was carried by the receding wave out of danger. A great deal of interesting information respecting the present lighthouse may be gathered from Mr. Price Edwards's little book, from whence we learn that the stones are of granite, dovetailed together, and up to a height of 25ft. above high-water level the tower is solid, with the exception of a large water tank let into it. From the same level to the centre of the lantern is

130ft., that is, nearly double the height of Smeaton's tower. It contains nine compartments, as compared with four in Smeaton's, and all the rooms have domed ceilings, their height from floor to apex being 9ft. 9in., and the diameter 14ft., with the exception of the two oil-rooms, which are somewhat smaller.

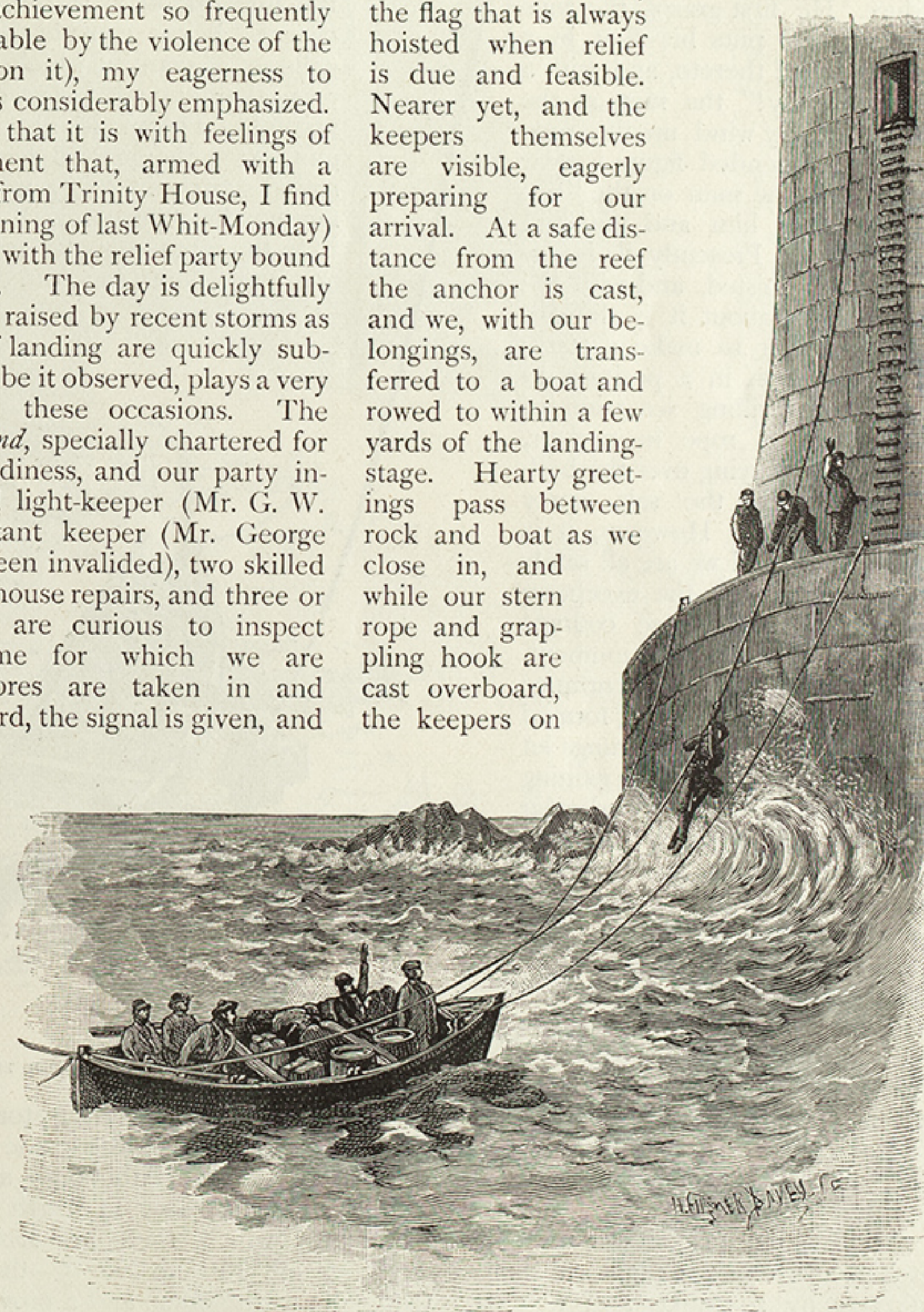
On learning that no journalist, intent on describing the Eddystone Lighthouse, had hitherto succeeded in landing on this most difficult rock (an achievement so frequently rendered impracticable by the violence of the waves beating upon it), my eagerness to attempt the feat was considerably emphasized. It will be imagined that it is with feelings of suppressed excitement that, armed with a special "permit" from Trinity House, I find myself (on the morning of last Whit-Monday) at Plymouth Dock, with the relief party bound for the Eddystone. The day is delightfully fine, and all doubts raised by recent storms as to the possibility of landing are quickly subdued—for weather, be it observed, plays a very important part on these occasions. The steam-tug *Deerhound*, specially chartered for the relief, is in readiness, and our party includes the principal light-keeper (Mr. G. W. Cooper), an assistant keeper (Mr. George Norton, who has been invalided), two skilled mechanics for lighthouse repairs, and three or four visitors who are curious to inspect the lonely sea-home for which we are bound. When stores are taken in and everybody is on board, the signal is given, and off we start in a southerly direction.

Although the waves have not yet subsided after recent disturbance, there is every prospect of a successful voyage, and we feel exhilarated by the fresh breeze and the beauty of the constantly changing scene. In passing the Breakwater Light we hail the keepers, who give us a parting cheer; while further on our right we see Ram Head (the point of

land nearest to the Eddystone), with the signal-station recently established by a telephone company for the purpose of signalling any

vessels entering the port, or passing up or down the Channel. Our trip will take about an hour and a half, but long before that time expires we endeavour to catch a glimpse of the lighthouse.

Presently, "There she is!" becomes the cry, as soon as the keen-sighted members of our party can discern its slim proportions on the distant horizon, six or seven miles away. A nearer approach enables us to perceive, close to the lantern, the flag that is always hoisted when relief is due and feasible. Nearer yet, and the keepers themselves are visible, eagerly preparing for our arrival. At a safe distance from the reef the anchor is cast, and we, with our belongings, are transferred to a boat and rowed to within a few yards of the landing-stage. Hearty greetings pass between rock and boat as we close in, and while our stern rope and grappling hook are cast overboard, the keepers on



LANDING.

the "set-off" (as the landing-stage is generally called) dexterously throw a couple of lines to be fastened to the prow, so that the boat may

be thus held in position while effecting the relief.

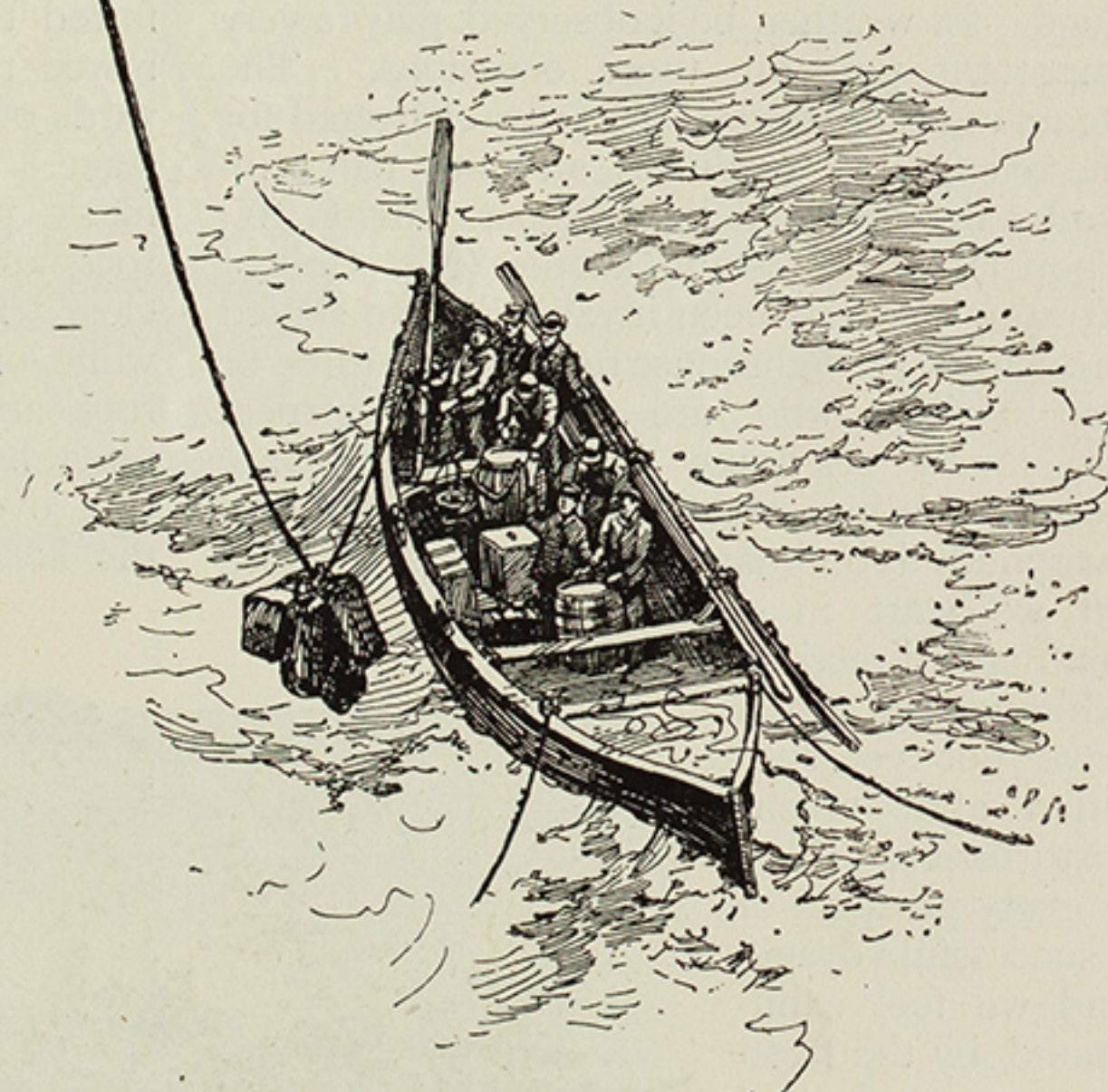
A strong rope, controlled by a winch, is then let down from a projecting crane half-way up the tower, the lower end being firmly held by one of the boatmen giving it a turn round a wooden pin at the stern. This satisfactorily accomplished we prepare to land, and to a novice the process is somewhat exciting. The principal keeper leads the way, and this is his method of procedure. He first grasps the rope tightly, then puts his foot in a loop attached thereto, and with a "Heave away!" the men at the winch steadily wind up the rope until the suspended figure is near enough for the man on the "set-off" to seize him and put him on his feet. Presently it is my turn to be hoisted, and with the boat tossing about it is difficult for a beginner to make a start; but I am soon in a position to realize the thrilling sensation of hanging on a rope in mid-air, jerking and swaying over the boiling surf, with the salt spray dashing around. However, it is quickly over, and we are all safely landed at last, with the exception of two visitors, whose courage gives way at the critical moment. From the "set-off" the entrance is approached by a ladder, formed by a series of gun-metal rungs let into the stonework, and on gaining the summit of this perpendicular climb of 20ft. I watch the men landing the stores, and make a rough sketch of the operation, at the conclusion of which (after much shouting and gesticulation) those bound for the shore are slung back into the boat, anchor is raised, and the released keepers give vent to their joyous feelings by lustily singing the refrain of a certain familiar song from which, in this benighted spot, one might reasonably have hoped to escape.

After our recent exertions we make for the kitchen and enjoy a plain substantial meal, followed by a smoke and a chat; then, escorted by Mr. Tom Cutting (third light-keeper), I make a détour of the building. Beginning at the entrance—the most conspicuous objects are life-belts and buoys, coils of rope on the walls, fishing-rods, and a

home-made lobster pot; under foot is the water-tank, capable of holding 3,500 gallons, the walls are 9ft. thick at this point, and the gun-metal doors weigh a ton, thus massively constructed in order to withstand the shock of heavy seas.

Thence, by a flight of sixteen steep iron steps (a similar flight connects each room), we proceed to the next compartment, where, as well as in that above it, is kept the mainstay of the light. In these two oil-rooms the mineral oil is stored, each of the huge cisterns being capable of containing 140 gallons, a quantity which will not be much more than enough to last nine months. The second oil-room is also used for storing gun-cotton charges and detonators for working sound signals in foggy weather, and rockets for signalling purposes.

In the next compartment—the winch-room—are two doors (one directly over each land-



TAKING IN STORES—A SKETCH FROM THE ENTRANCE.

ing-place) for receiving stores from the boat by means of a sliding crane working through a porthole over either door, as well as for landing and embarking in rough weather. Besides the winch, there are lockers for coal and paint. Room No. 5—the store-room—contains the crane and a provision cupboard for each man—note the string of herrings hanging outside the window.

Then comes the kitchen or living-room, where the small party of three cook and eat their meals and enjoy their leisure moments

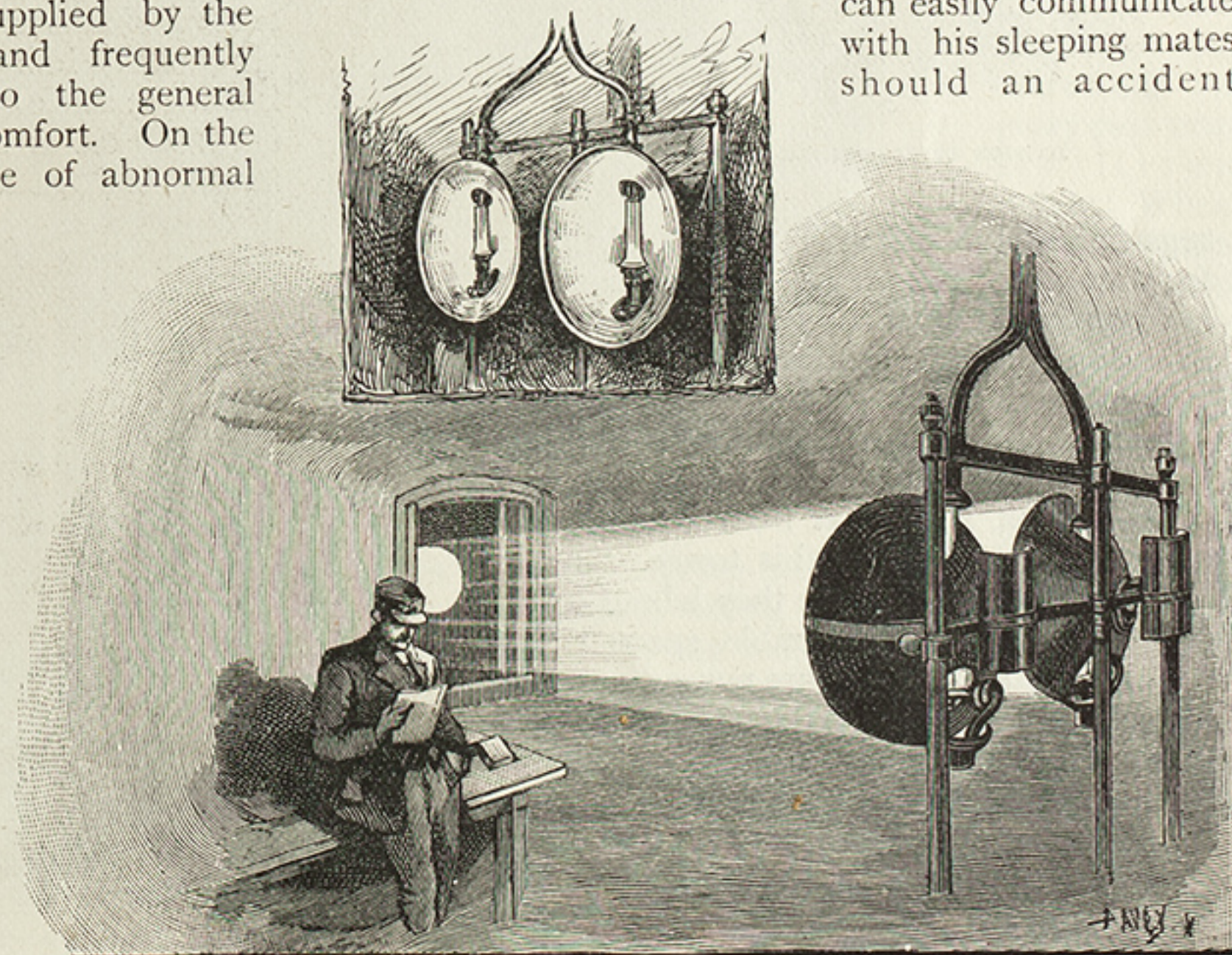
A VISIT TO THE EDDYSTONE LIGHTHOUSE.



AN AFTER-DINNER CHAT.

—decidedly cosy and scrupulously clean, with a specially made cooking-range and every domestic convenience. Although the granite walls are exposed (as in every room), their bareness is relieved by shelves and a dresser, containing pots, pans and dishes; while a bookcase filled with readable volumes (supplied by the Trinity House, and frequently changed) adds to the general appearance of comfort. On the hob stands a kettle of abnormal dimensions, and a window is converted for the nonce into a meat safe, the suspended legs of mutton kept fresh by exposure to the cool air. Here I am shown some interesting relics of the Smeaton lighthouse, viz., a tea-canister (probably a century old, and still in use)

eight compartment is the bedroom, having five berths (two above and three below) with cretonne curtains, and below are cupboards for clothes; the two speaking-tubes fixed on the wall are connected with the lantern and low-light room respectively, so that the keeper on night duty can easily communicate with his sleeping mates should an accident

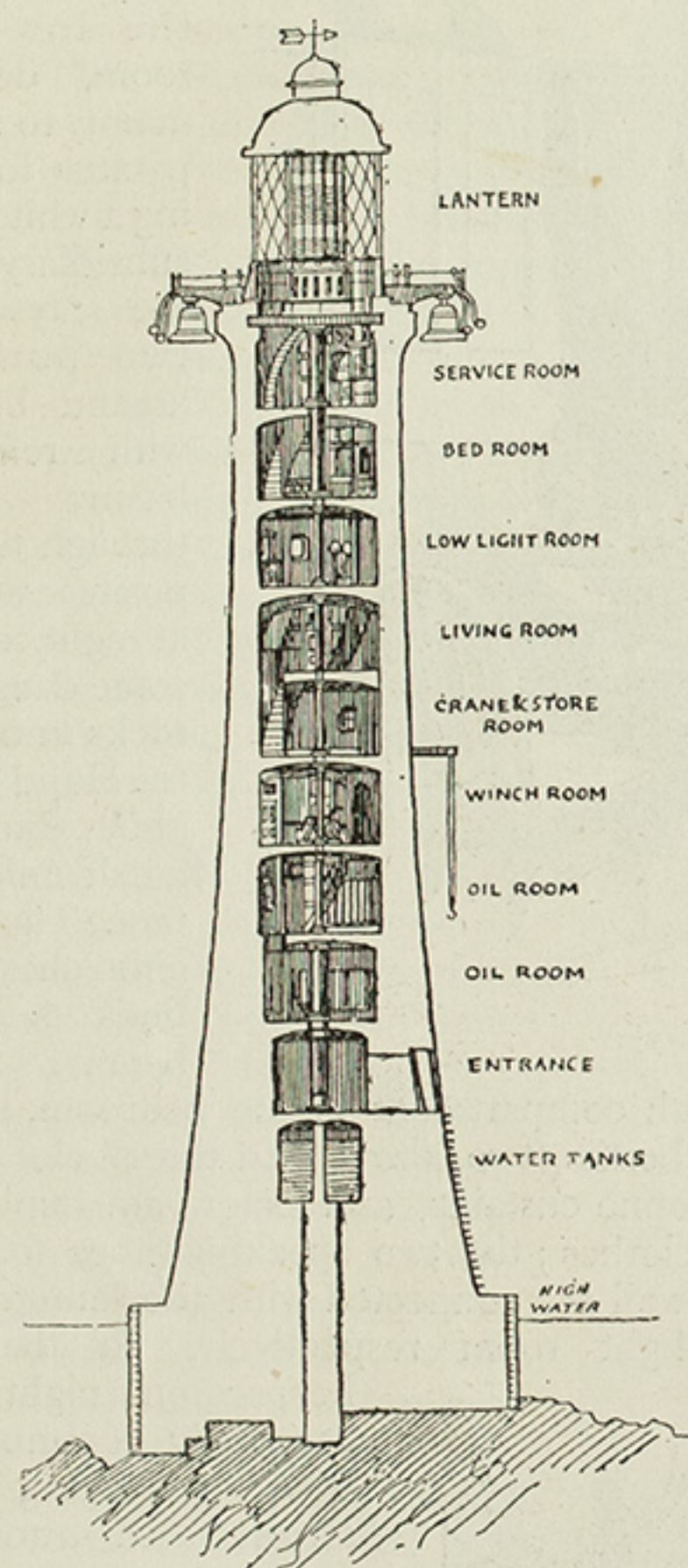


THE LOW-LIGHT ROOM.

and some tools of little utility.

Still ascending, we reach the low-light room, devoted mainly to an apparatus for giving a white fixed subsidiary light, the rays from two powerful argand burners with reflectors being sent through the opposite window at night, to mark some dangerous rocks known as the Hand Deeps about three and a half miles distant. The medicine chest also finds a place here. The

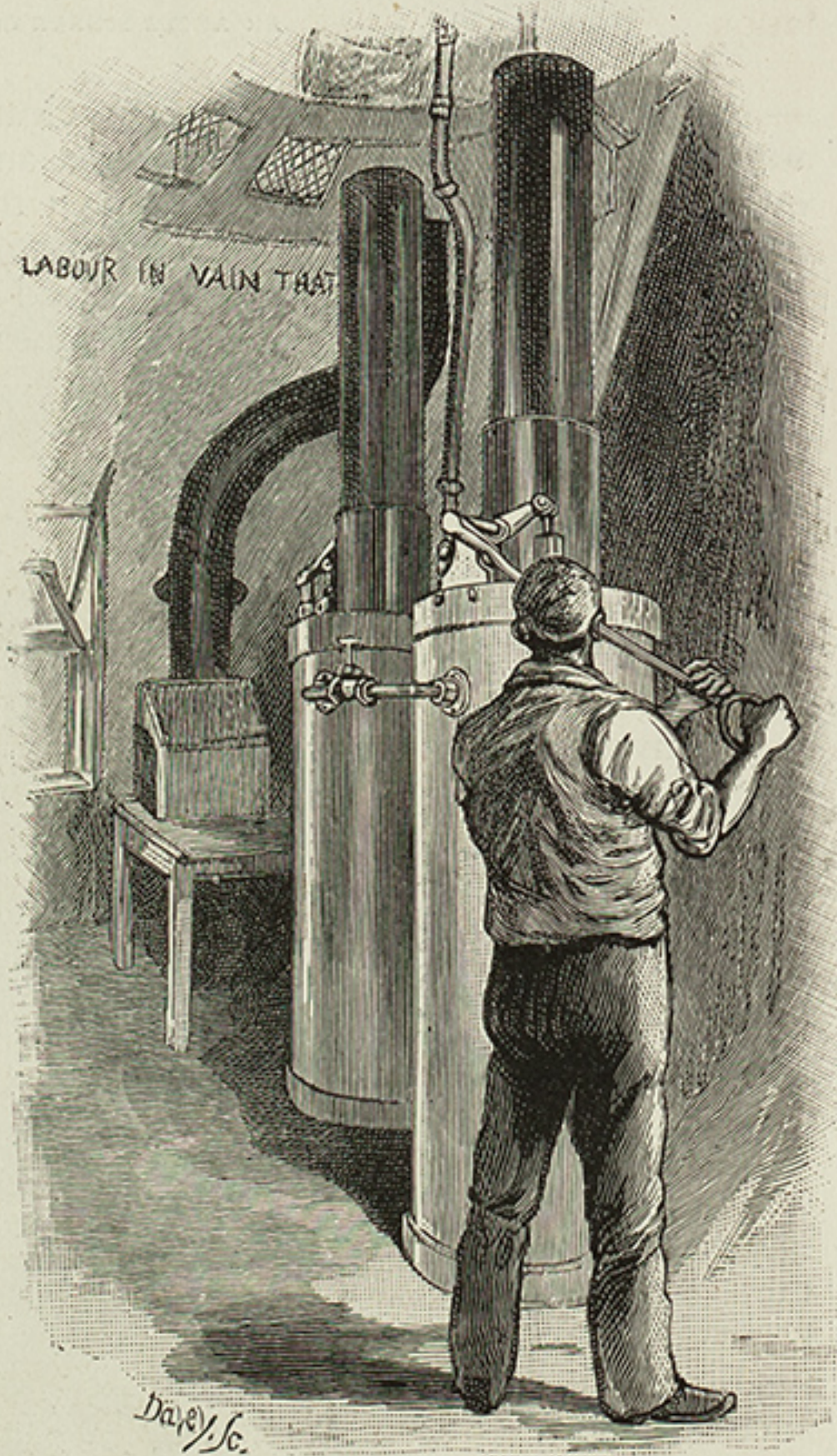
happen and assistance be required. The room over the bedroom is called the watch or service room, and may be properly



SECTION OF EDDYSTONE LIGHTHOUSE.

regarded as the office of the establishment, for it contains official books and papers (in bookcases and on shelves), electric machines, galvanometers, and barometer, as well as spare burners and spare glass for lantern, lamp cylinders, and various diagrams on the walls; around the room, deeply incised in the course of the ceiling, is the text from Psalm cxxvii., adopted by Smeaton for his tower: "Except the Lord build the house they labour in vain that build it." Considerable space is here devoted to the two pressure pumps for supplying oil to the lamps by means of weighted rams, which, being first raised by a pumping lever, descend gradually into the oil, forcing it up the pipes into the lamps. The chief work performed in the service room is at night, when the light is going and a keeper is on duty.

Surmounting the last flight of stairs we enter the most interesting compartment of all, namely, the lantern. It is 16ft. high, 14ft. in diameter, and cylindrical in form. The framings are made of steel, covered externally with gun-metal, and there is a very careful arrangement for thorough ventilation, having regard to the great heat thrown off by the lamps. But the lighting apparatus is clearly the most important feature, the present system being the outcome of many costly experiments in optical science. The special kind of lamp in use is known as a Douglass improved six-wick burner, that is, one having six tubes of wick of varying sizes, the larger encircling the smaller, which, when burning, produce a solid flame equal to the intensity of 722 standard sperm candles. Two such burners are fitted, one above the other, within the revolving drums (now to be described), so that in bad weather flashes of enormous intensity are sent forth, the combined illuminating power being equivalent to a quarter of a million candles, or about six thousand



PRESSURE PUMP FOR SUPPLYING OIL TO LAMPS.

times that of the original candle light of Smeaton's time!

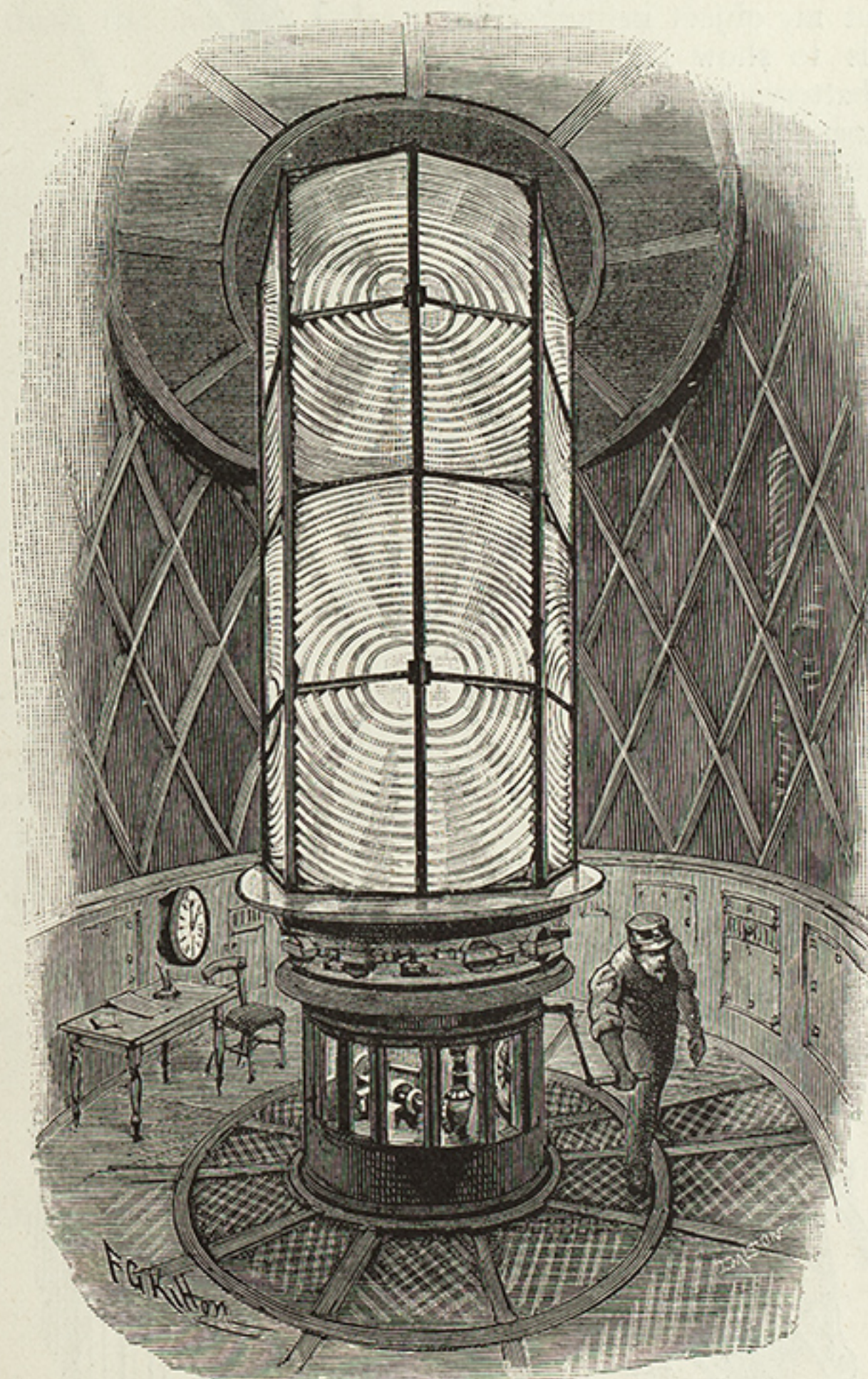
The glass apparatus, by which the effect of each burner is augmented and economized, consists of two twelve-sided drums, each 6ft. in height, and each side or panel of which is formed by a central lens or bull's-eye, and surrounded by concentric rings of larger bull's-eyes, so that the same effect is obtained as though a portion of one huge lens were employed. The two bull's-eyes of adjoining panels (as Mr. Price Edwards clearly explains) are brought close together, much resembling two eyes squinting; and on the rotation of the drums, with the inside central light burning, each bull's-eye and its surrounding rings carry round a concentrated beam of light, which becomes visible to the outside observer as soon as the focus of the bull's-eye falls upon him. A very short interval occurs between the flash of the first bull's-eye and that of

the second, and after two such flashes nearly half a minute elapses before another pair of squinting eyes comes round and discharges the two flashes; and thus is obtained the distinctive light of the Eddystone. The two drums are superimposed, with a lamp in each, so that, in foggy weather, when both act together, a double lighting power is procurable. During the day crimson curtains are suspended inside the lantern, to match the colour of

the paint outside, when the whole exterior of the lantern appears red, to serve as a day-mark for mariners.

It is one of the duties of the keeper on watch to record on a printed form, night by night, particulars as to the state of the lamps, height of flame, temperature, climatic conditions, etc., etc., such reports being forwarded to the Trinity House every month.

An iron door in the lower part of the lantern communicates with the outside gallery of the tower, and from this breezy position an extensive view is obtained, the Devonshire coast-line being faintly discernible. During holiday time there are cheap excursions from Plymouth to the lighthouse by large steamers, and one of them is now nearing us, crowded in every part with its living freight. When it comes within a hundred yards of the rock, we on the gallery signal to it by dropping the clapper of one of



IN THE LANTERN—WINDING UP REVOLVING GEAR.

the two large fog-bells, which is responded to by a vigorous waving of handkerchiefs on deck. The bells just referred to (which hang under either side of the gallery) were used in foggy weather until last October, when the more effectual method of exploding small charges of gun-cotton by electricity was substituted. It so happens that during my visit a sea-fog suddenly comes on, and this signalling apparatus is brought into action, there being one explosion every five minutes. The

jib of the crane (placed vertically outside the lantern) is first lowered, detonators are securely fixed to the charges and connected with the battery, and then placed at either end of the semi-circular bar at the top of the jib. The latter is then raised and the current set in motion, when an explosion ensues which can sometimes be heard eighteen miles away. The open door in my sketch should really be closed, but my object in so representing it is to show the working of the battery at the moment of connecting the current.

The liability of such an isolated object as the tower being struck by lightning is ingeniously provided against by connecting all the metal-work with copper conductors, and ultimately fixing a rod down the tower to the rock below water. Should the lightning strike any portion of the metallic system it will probably go through the whole, and discharge itself harmlessly into the sea. As further precautions against fire, the floors are of stone covered with slate; all doors and window frames and sashes, and all external doors and shutters are of iron or gun-metal, so that the building is completely fireproof.

Now let me describe the duties of the light-keepers and their mode of life in this solitary abode, so far removed from busy humanity. To this lighthouse, as to all other rock stations on the coast, four keepers are attached, the principal (G. W. Cooper) and three assistants (T. Cutting, G. Norton, and W. Davies); but three only are on duty at one time.

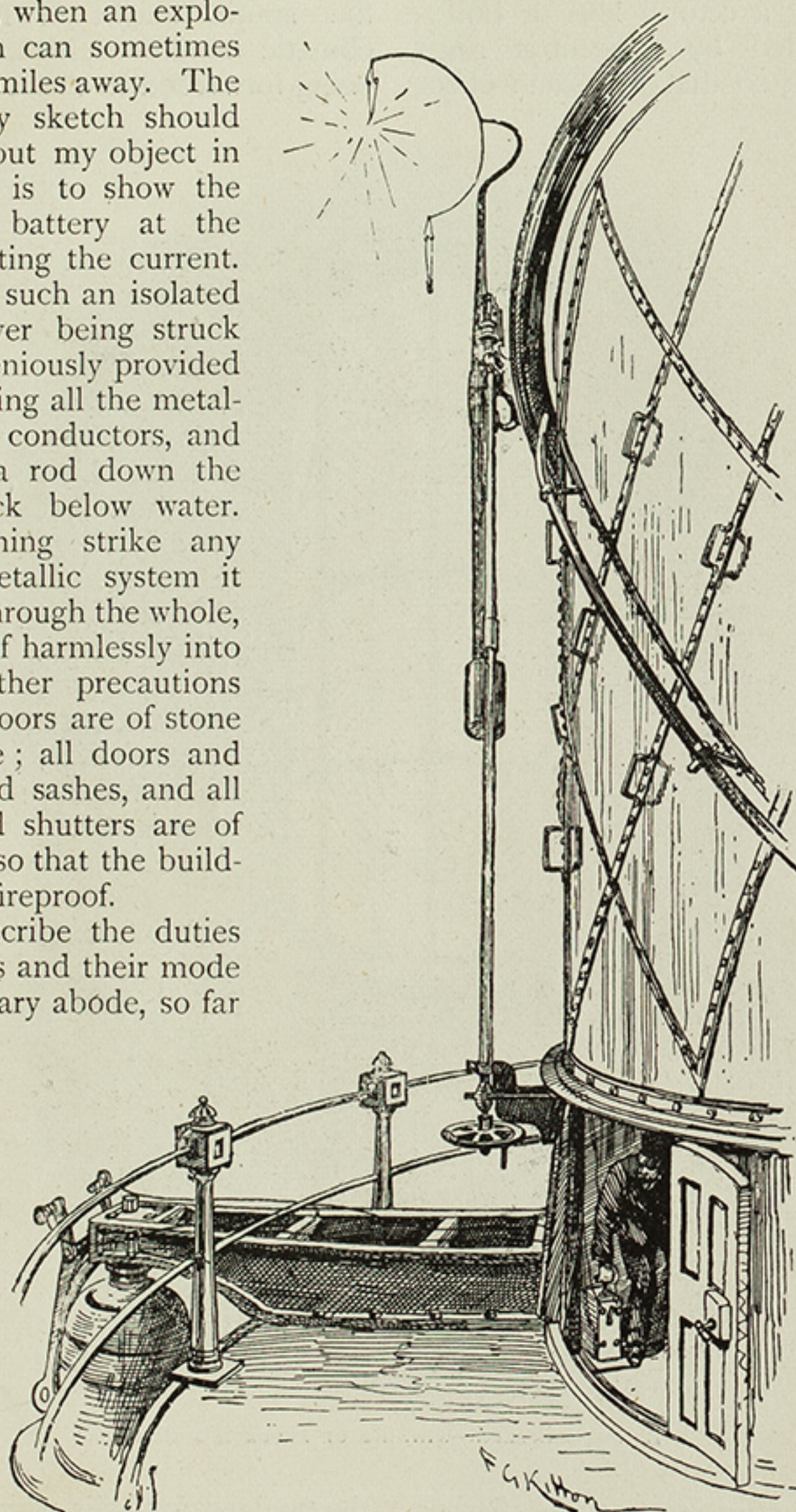
Each keeper has three months on the rock, followed by a month ashore, a much longer period in each case than was customary when the lighthouse was first opened.

If the authorities could be persuaded to reduce such a long spell of duty by one-third, thus making it two months—a consummation devoutly desired by the men—it would be a

generous act, and the kind consideration would be keenly appreciated, for it seems that such a monotonous round of duties, carried on day by day so far away from their fellow men, invariably induces, after the first month, acute depression of spirits, the attack

lasting from twelve to twenty hours, and, work being temporarily impossible, the sufferer remains in his berth until the sickness moderates, his mates kindly fulfilling his duties meanwhile. Every month (weather permitting) a relieving vessel goes out to the lighthouse, taking with her the man who has had his month ashore, and returning with the keeper who has completed his three months; but it frequently happens that the weather upsets their calculations, when communication by signals alone can be effected. In fine weather each man is on duty four hours and eight hours off, but when the atmosphere is thick there is double duty to perform, two men being on watch at the same time.

In the day-time there is work of another kind to be done. Besides keeping in order the lighting apparatus and polishing metal-work throughout the building, the men take it in turns to carry out domestic arrangements, such as scrubbing floors and tables, for the whole place is kept absolutely free from dirt. The cooking and preparation of meals must, of



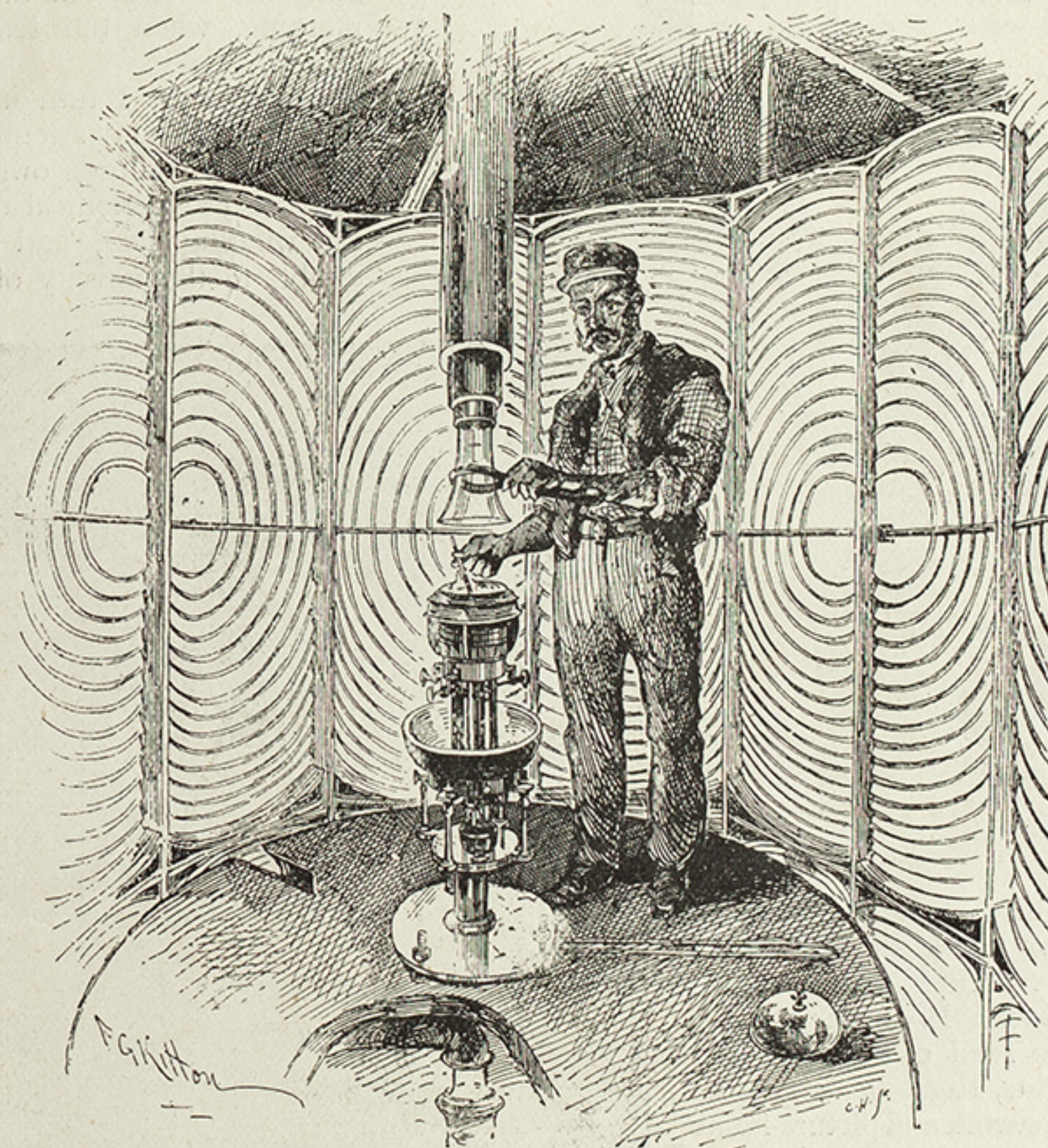
FIRING FOG-SIGNAL.

course, be attended to, and every Saturday night the *chef* appointed for the week concocts a plain but wholesome plum-pudding, which has become a regular institution. Light-keepers, nowadays, are not reduced to the necessity of *eating the candles*, as they occasionally were in Smeaton's time, for a large supply of tinned meats and biscuits, provided by the Trinity House, is always kept ready for emergencies.

At the hour of dusk the lamp is lighted,

column, running centrally through the whole length of the lighthouse, was constructed to hold both weight and chain for working the machinery which rotates the drums. Now, as the beams of light flash out seaward, I leave our friend to his solitary task for a chat with his mates in the snug kitchen below.

I find the light-keepers quiet and intelligent, having a full sense of their responsibility, although they do not take kindly to their occupation.

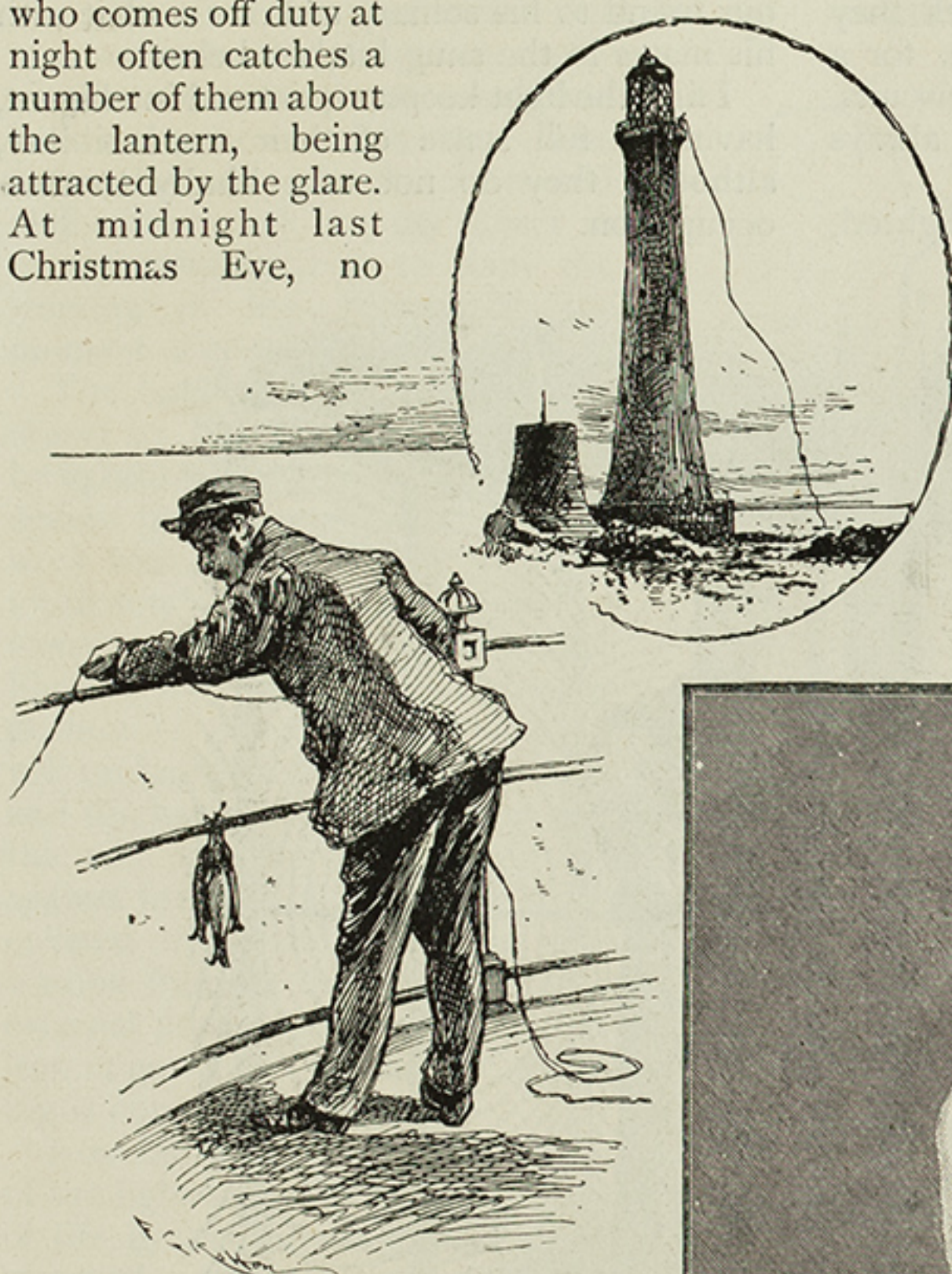


LIGHTING UP.

so I accompany the keeper (who now begins his watch) into the interior of the glass drum, and observe how, with a spring grip, he raises the lamp-chimney and ignites the wicks; but, being still daylight, the illumination is not brilliant, although it increases in brightness as night comes on. The next proceeding is to wind up the gear which rotates the drums, and as the weight to be lifted is equal to a ton, and the operation lasts about an hour, it is somewhat fatiguing. The weight is contained in that portion of the column situated in the two lower rooms, which hollow iron

Even here, however, they are able to enjoy a modicum of pleasure, for fishing is practicable all the year round—in summer from the "set-off," with rod and line, in winter from the lantern gallery, because then the fish, being shy, keep away from the rocks and can only be caught by means of a long line with a bladder attached, which is blown by the wind in the direction required, the fish thus captured including bass, pollock, bream, horse mackerel, and congers. The bladder-line is also used for transferring letters to pilot-boats, when they

come sufficiently near the rocks, and the presence of these boats is especially welcome in bad weather, as the only means of communication with the shore. During the season when birds migrate, the keeper who comes off duty at night often catches a number of them about the lantern, being attracted by the glare. At midnight last Christmas Eve, no



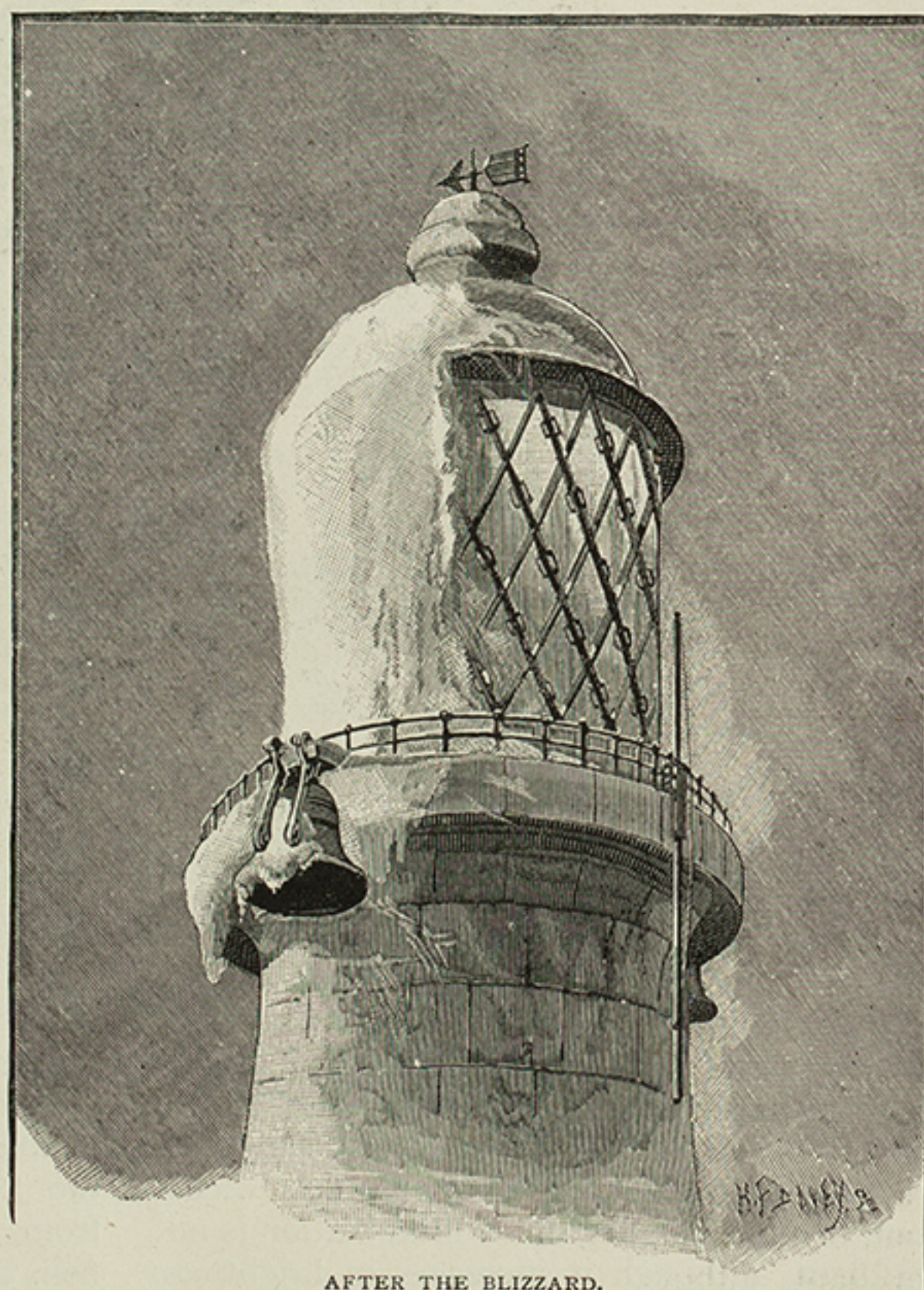
FISHING FROM THE LANTERN GALLERY.

fewer than three hundred lapwings, with a few larks, thrushes, and plovers, were secured in the course of a few hours. In winter months the men are fond of reading; but cards, draughts, bagatelle, and such hobbies as fretwork and picture-frame making offer superior attractions.

On a fine summer's day it is delightfully quiet in the lantern, the gentle lashing of the waves and subdued humming of the wind being the only sounds that reach the ear. But there are times, as the fury of the tempest beats upon the massive tower and the blinding flash of lightning permeates every apartment, when the men in their solitude cannot fail to be impressed by the mighty power and majesty of Nature's forces; 'tis then that the roaring sea rises mountains high, dashing with thundering roar upon the surrounding

reef, the huge waves sometimes leaping up the tower to break with great force under the lantern gallery. It was a terrible experience, ever to be remembered by the light-keepers, when, on the night of the blizzard in March, 1891, the lantern was partly embedded in snow, entirely obscuring the light on one side, and effectually blocking up the exit. The storm was of such severity that nothing could be done to clear away the obstruction till the next morning, when the tempest had abated.

At midnight I turn into one of the berths, but my attempt to sleep begins as a failure, owing principally to the periodical clanking of the winding gear, and partly, no doubt, to the novelty of the situa-



AFTER THE BLIZZARD.

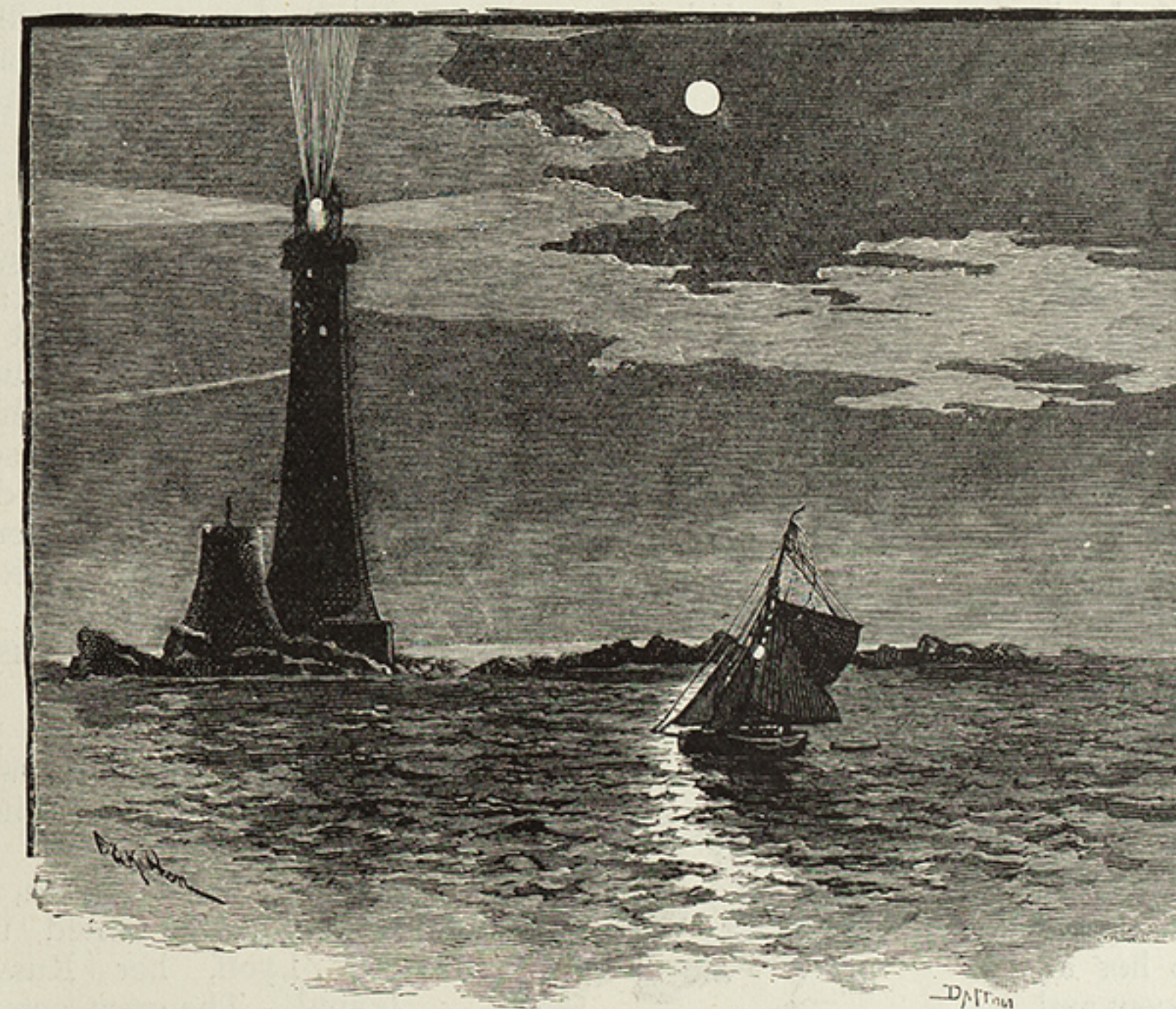
tion; on the second night, however, I am more successful. Although busy during my stay with sketching and observations, I soon begin to feel that life in a lighthouse has its disadvantages, not the least of these being the sensation of extreme

loneliness and isolation. After breakfast on the third day of my visit it is considered desirable to keep a look-out for a vessel that can take me ashore, but it is not until evening that we are able to attract the attention of some fishermen and make them understand what is required of them. The reply comes that they will send the row-boat to the rock at 10 o'clock, so we spend the interval in chatting and a game of whist. Accordingly, at the appointed hour, the boat awaits me, and, with a hearty farewell and a cheerful "good-bye" from all, I drop into the boat and am taken on board the fishing-craft, when, somewhat to my chagrin, I learn that we must wait about three hours for the turn of the tide. While rocking about on the waves

I can admire the stately and dignified tower of the Eddystone pointing defiantly upward, and am fascinated by the effect of the bright rays from the lantern flashing across the sky, the beauty of the scene being enhanced by the light of the silvery moon reflected in the sea.

At last, with a favourable tide and a fair wind, we set sail in the early morn for Plymouth. Now the day is dawning, and, as we proceed, the lighthouse gradually becomes invisible, but the occulting light, glowing like a star of exceptional brilliancy, may be seen long after the tower itself is lost to view.

Steadfast, serene, immovable, the same
Year after year, through all the silent night,
Burns on for evermore that quenchless flame,
Shines on that inextinguishable light!



THE EDDYSTONE LIGHTHOUSE—A CALM EVENING.