out in Russian braid with a tinsel thread interwoven, and with thick cord.

Children's frocks are very simple for the moment, and thousands are being sold in the form of jerseys, with the beaver lining, to the edge of which a little box-pleated skirt of some serviceable woollen is sewn. Sailor dresses, even for girls, are constantly worn, the kilt-pleated skirt rendering them simple; and the long loose dresses in wool or silk, with smocked yokes, and smocking at the shoulders and cuffs of the sleeves, make the easiest-worn and healthiest of costumes. Some of the most artistic folks do not confine them in any way, but a sash round the waist makes them more generally acceptable; two or three buttons at the back are the only fastenings necessary. At all risks, mothers should take care to keep their children warm; cold is a very general source of illness, and this should be taken into consideration in choosing head-gear. A

woollen hat made to match the dress, soft and not too weighty, may be made picturesque, and it keeps the little one warm.

Whether entirely woollen under-wear be essential, must be left to medical authorities, but of a truth some woollen under-garment should of necessity be worn next the skin, and thought should be bestowed on keeping the feet warm.

One little hint is worth mentioning: to render the foundation of plainly-made dresses firm, both for children and adults, dressmakers are lining them entirely with horsehair, thereby supporting the upper draperies. Balayeuses are now more often made of pinked-out silk than of muslin.

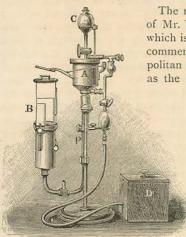
The mousse-greens are still most fashionably worn, and blend well with crimson velvet, for evening wear; try this combination, and you will find yourself the possessor of one of the most effective dresses in the room.

# THE GATHERER:

# AN ILLUSTRATED RECORD OF INVENTION, DISCOVERY, LITERATURE, AND SCIENCE.

Correspondents are requested, when applying to the Editor for the names and addresses of the persons from whom further particulars respecting the articles in the GATHERER may be obtained, to forward a stamped and addressed envelope for reply, and in the case of inventors submitting specimens for notice, to prepay the carriage. The Editor cannot in any case guarantee absolute certainty of information, nor can he pledge himself to notice every article or work submitted.

# The New Standard Lamp.



The new pentane lamp of Mr. Vernon Harcourt, which is the standard recommended to the Metropolitan Board of Works, as the legal standard in

the United Kingdom, is illustrated herewith. Liquid pentane is put into the chamber, A, where it is volatilised and mixed with air. The mixed gases flow down the pipe, P, to

the burner, B, where they are consumed. When the pentane and air are mixed in definite proportions a flame  $2\frac{1}{2}$  inches high gives the light of the average standard candle. The size and construction of the lamp are such as always to give this height of flame. The supply of oil is kept up by causing the pentane to drop from the reservoir, C, into the mixing chamber, A, and the rate of dropping is specially regulated. This supply can be cut off altogether by the stop-cock shown below the reservoir. The screw on the top of the box, D, which is connected to the lamp by rubber

tubing, is intended to regulate the level of the pentane in the chamber, A, and the height of the flame. In short, every precaution is taken to insure a steady light.

The platinum standard light of M. Violle is known to be difficult of reproduction, and this is a drawback to its practical use. Mr. Dibdin, however, the Chemist to the Metropolitan Board of Works, has tried with promising success a modification of it, in which a piece of platinum foil is heated to its melting point by means of the oxy-hydrogen flame. The foil is placed behind a steatite screen perforated with an aperture smaller than the portion of platinum actually incandescent. The oxy-hydrogen flame is gradually increased until the platinum foil melts. When this occurs the oxygen is turned off, and a fresh portion of the foil, which is carried on two rollers, one on each side of the aperture, is brought into position, and a second experiment made. Successive readings are then obtained in rapid succession. The foil is wider than the portion actually perforated by the intense heat, so that by turning a winch-handle a fresh surface is almost instantly obtained. The operations involved in testing are making about a quarter of a turn of the winch-handle, and turning the oxygen on and off. The aperture of the steatite perforation is about one-fifth of an inch in diameter, and allows light equal to a little more than two candles to pass to the photometer disc. The spectroscope shows that the spectrum of the light is brilliant in all its parts. The

amyl acetate flame is deficient in violet rays; the pentane, Methven, Keates, and candle standards give spectra practically alike. Some candles, however, show sodium bands, owing to borax in the wicks.

# Lighting Watch-Dials.

A French inventor has applied the miniature electric incandescent lamp to watch-dials: the current being supplied by a small pocket-battery. The dial is of ground glass, and the lamp behind it lights it up: the effect being enhanced by a flat reflector. A key is included in the circuit to close the current when the light is required. It is obvious that there are circumstances in which such a device will be useful, and where it is inexpedient to strike a light to see the time—such places as mines, or in military operations. The apparatus is equally applicable to clocks.



#### The Magnetic Oracle.

An ingenious scientific toy of French device is illustrated in the accompanying figure. The way to make the "oracle" speak is to write on twelve cards the questions desired, of a historical, geographic, scientific, or other nature. One of the company takes a card at random, and reads out the question on it. The card is then placed under the wizard's feet in a groove made to receive it, and at once the wizard turns round, and after a few sways points with the rod to a number on the circle round him. Upon referring to this number on a printed list the correct answer is obtained. By varying the questions and answers an indefinite number of replies can be given. The result is brought about by a vertical U-shaped magnet, under the robes of the wizard, having the two poles at the base of his figure. In each of the cards supplied there is concealed another magnet, in the form of a straight rod. Each of these magnets occupies a different position in the card containing it from the position of the rest. The consequence is that each card, when placed in the receptacle provided for it at the feet of the wizard, causes the latter to turn on his pivot by attraction between the magnet in the card and the magnet concealed under his robes. The wizard oscillates till the contrary poles of these magnets are opposite each other, and the divining rod now indicates the corresponding number of the answer. It is to be understood that the circle is properly marked beforehand from the list of questions supplied.

#### An Electric Kettle.

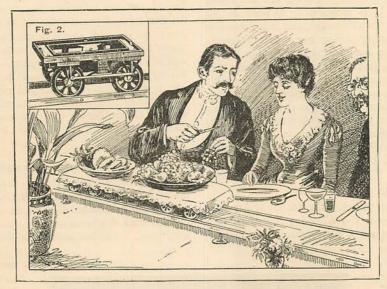
A kettle heated by electricity has been brought out in America, and may be mentioned as a curiosity in science. The kettle has a thick bottom, in which is placed an electromagnet. Alternating currents of electricity, that is to say, currents which rapidly change in direction, are sent through the wire of this electromagnet, and as a consequence the iron core of the latter becomes heated by what are technically called the "Foucault currents," generated in it. These induced currents heat the iron, and so warm the water in the kettle, like a fire under it. It will be seen that this is quite a different device from the electric heaters already brought out, in which the heat was obtained by passing the current through a resistance coil of wire.

## The Growth of Suns.

Mr. J. Norman Lockyer, F.R.S., has recently advanced a hypothesis of the constitution of the heavenly bodies, which, if not exactly novel, is nevertheless supported by him with an array of knowledge and experiments which has not before been brought to back it up. The hypothesis is to the effect that meteorites are the raw materials of nebulæ, suns, and planets. To give Mr. Lockyer's own words, "All self-luminous bodies in the celestial spaces are composed of meteorites, or masses of meteoric vapour produced by heat brought about by condensation of meteor-swarms due to gravity." That is to say, the meteorites of space colliding with each other and growing by aggregation finally become glowing suns; their heat being produced through the action of gravity. The process of aggregation produces at different stages a nebula, a comet, and a star. The spectra of nebulæ, comets, and stars have been compared with the spectra of heated meteoric matter in vacuo. By warming a meteoric fragment in a vacuum tube through which an electric discharge passes, the nebula spectrum is imitated. By warming it still more, the spectrum obtained is like that of a comet, when nearest the sun, and that of certain fixed stars. A comet is thus regarded as a star which has come within the sun's attraction; and the stars are considered as essentially similar, but at a higher temperature, owing to greater energy of collision amongst the meteoric matter composing it. As the mass grows by accretion the temperature rises until the mass is volatilised into a globe of incandescent vapour, as for example Sirius. After this the orb cools slowly, and solidifies. Our sun is in this stage, its temperature being estimated at rather more than that of the electric arc. Mr. Lockyer estimates that the nebulæ and distant comets have about the same temperature as the Bunsen gas-burner; while some of the younger stars have something like that of the Bessemer converter. Some suns are known which appear

to have a temperature about that of the oxy-hydrogen light, or even the Bunsen flame. Moreover, it is believed that certain unknown bodies which perturb Sirius may be stars which have cooled to obscurity. Mr. Lockyer's hypothesis, or rather the hypothesis which he has adopted, should, of course, only be taken as a hypothesis. It may in time give place to another, or be itself modified. He has, however, developed it

the dish to be served to the guests. As will be seen from Fig. 1, the track forms a "circular" railway, which is about 115 millimètres (about  $4\frac{1}{2}$  inches) wide. The car (Fig. 2) is 75 centimètres (about 29 inches) long, and 22 centimètres (about  $8\frac{1}{2}$  inches) wide. It is carried by two bogies, one of which is seen in the right-hand corner of Fig. 2. A tiny electric motor is attached to one of the bogies, and drives the car by



AN ELECTRIC TABLE WAITER.

with persuasive skill. Time will show whether his deductions will stand the test of further investigations.

### Being Invisible.

The recent researches of MM. Alfred Binet and Charles Féré have brought out the fact that a hypnotised subject can be made to awaken from the trance, and see every one present except any person she is instructed, whilst in the trance, not to see. For the subject that person does not exist, and if he stands in the way, or touches the subject, the latter does not perceive him. The fact calls to mind the old tales of invisible persons, and the secret of fern-seed. A still more remarkable result of the experiments of these gentlemen is, however, the fact that a hypnotised patient can be instructed to commit a crime, no matter what, and will execute the command, several days after the suggestion is made, in a manner showing originality and device. This startling discovery has led the investigators to propose that hypnotised criminals ought to be treated like insane criminals by society, in self-defence.

#### An Electric Table Waiter.

A French gentleman, M. Gaston Menier, has introduced a novelty into his dining-room in the shape of a miniature electric railway, which runs along the centre of the dinner-table, and guides a small waggon bearing means of electricity drawn from conductors according to the well-known Siemens system. The speed of the car can be varied from 10 centimètres (nearly 4 inches) to 1 mètre (rather over a yard) a second; and the car, which weighs 7 kilogrammes (about 15 lbs.) empty, is capable of carrying a load of 25 kilogrammes (about 55 lbs.)—for example, a fish with sauce-bowl. By means of this device the table can be served without personal attendance, the car being controlled by the host. The track is mounted on oak-wood, which raises it about 10 centimètres (4 inches) above the level of the table.

#### Keeping Preserved Fruit.

Professor Tyndal has shown that atmospheric germs do not pass through a layer of cotton wool; and the discovery has been applied to keep preserved fruit by covering the jar holding it with cotton batting. The germs of putrefaction in the fruit are said to be rendered harmless by cooking, and the cotton batting keeps out those of the air.

#### The Opsiometer.

The "Opsiometer" is a new instrument for testing the eyesight. It consists of a mahogany case with two front eye-holes, behind which are two travelling bands mounted on rollers. These bands have holes in which different lenses are fitted, and the person whose sight is to be tested looks through the holes and lenses at

printed matter behind. The lens proper to the impaired vision of the observer is at once found in this way, for both or for either eye. The lenses are shifted in the opsiometer by means of the rollers and the travelling bands.

# A New Life-Buoy.



A new life-buoy is shown in our illustrations, both when in use and when hung up. It is so made as to open out on falling into the water, and it is capable of supporting one or more persons inside. On the buoy reaching the water signals are lighted instantaneously, which burn for some time, if the buoy is used at night. Sustenance is also contained in the buoy, and, as will be seen, its shape is a defence against the attack of sharks. We may add that the inventor has also devised a sounding-lead, which rings an alarm-

bell on board when it reaches the bottom.

#### In Case of Fire.

In a lecture delivered before the Society of Arts, Mr. A. W. C. Shean gave the following directions how to act, which ought to be very widely known. Fire,

he pointed out, requires air to feed it, therefore on its appearance every effort should be made to exclude the air from it, by shutting all doors and windows in the house. By this means it may be confined to a single room for a time sufficient to allow all inmates to be aroused and escape. If the doors and windows are, on the contrary, thrown open, the fire will be fanned by the draught, and increase rapidly. It

must never be forgotten that the most precious moments are at the beginning of the fire, and that not a moment should be lost in dealing with it. In a room a table-cloth can be used to smother a large sheet of flame, and a pillow to beat it out. So also with a coat or other such article. The great point is presence of mind, calmness in danger, action guided by reason and thought. In all large houses buckets of water should be placed on every landing, a little salt being put in the water. Always endeavour to attack the bed of a fire. A wet silk handkerchief tied over the face will make breathing possible in the midst of dense smoke, and a blanket wetted and wrapped

round the body will enable a person to pass through a sheet of flame in comparative safety. Should a lady's dress catch fire, let the wearer at once lie down. Rolling on the floor may extinguish it, but if not, any cloth (woollen preferred) wrapped tightly round the body will do so. As to burns, they become less painful when the air is excluded from them. For simple burns, oil or the white of an egg may be used. One part of carbolic acid to six parts of olive oil is found invaluable in most cases, slight or severe, and the first layer of lint should not be removed until the cure is complete, but should be saturated by the application of fresh outer layers from time to time. Linen rag, soaked in a mixture of equal parts of lime-water and linseed oil, also forms a good dressing. Common whiting is good applied wet, and continually damped with a sponge. It may be mentioned here that a shop was set on fire during the past summer by a large glass lens condensing the sunshine from without.

# Coloured Photographs.

The new method of producing coloured photographs, due to Mr. Mayall, is not a realisation of the dream of photographists to take photographs from nature with all her hues displayed in them, but the results are very good. Another method is that known as the

"Cellerier - Parkes." recently illustrated by specimens in the Pall Mall Gallery. The colouring is effected by stripping the gelatine film on which the photograph is taken from its original support, colouring it, and replacing it on a backing of paper. Such "carbon" films are very durable, and the colours are protected by them from damp and injury. nearest approach to actual colouring by the rays of light

themselves is that made by Mr. Carey Lea, who has recently found certain silver salts which, when exposed to coloured light, tend to reproduce the colour of the light. It may be that further research in this direction will be rewarded with success.



A NEW LIFE-BUOY.-IN USE.

# The Ancient Porphyry Quarries.

The ancient porphyry quarries of Egypt worked by the Egyptians and the Romans are to be re-exploited by an Englishman, Mr. Brindley, who has acquired a concession from the Khedive. These quarries are situated beyond the watershed of the Nile valley, about ninety-five miles from the river, and are reached by caravan journey from Keneh in travelling along the flank of the Gebel Dukhan. The great porphyry quarry is 3,650 feet above the level of the sea, and there are remains of an ancient town with workshops near it. Spotted and grey and brecciated porphyries are obtained from this part. Mr. Brindley intends to transport the porphyry to the Red Sea, a distance of twenty-five miles, instead of to the Nile as in ancient times. It may be mentioned that these quarries, long forgotten, were rediscovered by Burton and Wilkinson in 1823.

# An Automatic Shop.

Automatic boxes for supplying cigarettes, chocolate, post-cards, &c., are now familiar to us; but the principle of their action has been considerably extended in its application by a Manchester inventor who has, through the agency of an indicating dial and a revolving drum, produced what may be called an automatic shop. At present it is made to deliver twelve different kinds of sweetmeats, at the desire of the purchaser; but various other modifications are possible. The apparatus is introduced into several of the District Railway stations. We may mention here that there is now an automatic perfume distributor of this class.

### An Iron Bouquet.

Prince Bismarck has been presented with a fine specimen of the blacksmith's art by the workmen of the well-known Silesian rolling mills. It is a bouquet made of the fine iron plate produced by these mills. The bouquet is thirty inches in height, and composed of elder-flowers, buttercups, heliotrope, forget-me-nots, and other flowers, interspersed with maiden-hair fern, and surmounted by a branch of oak, surrounded by sprays of laurel and olive. The artistic design is due to Frau Christine Jauch, an artificial flower maker of Breslau.

We may add that another interesting example of art metal work has been executed lately by a blacksmith employed by the Simonds Rolling Machine Company, of Fitchburg, Massachusetts, U.S. It is a steel goblet forged by hand from a solid piece of 1½ inch round steel, and without the use of any boring tools. The stem is six-sided, slender, and gracefully curved, the body very thin and even; the hammer-marks being hardly perceptible.

### Scented Fans.

Perfumed fans are now in fashion at Paris. The framework is made of rose, lemon, or sandal wood, which, on being warmed by the air of a room, gives out an agreeable fragrance.

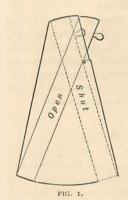
## A New Electric Target.

Some trials have been made at Washington of a new shooting-target which announces the position of the shot by electricity. The target is like other targets in front, but has a series of pendulums behind which are set in vibration by the impetus of the shots, and, in moving, make electric contacts which tele-

graph the position of the shot to an indicating apparatus at the firing-stand, which is connected to the stand by seven wires. It is intended to save time and money in rifle practice.

#### Safe Drawers.

Mr. E. A. Sharp has devised a set of receptacles, such as drawers and letter-boxes, which have the merit of safe-guarding their contents from being abstracted. The device is simple, and consists in forming the drawer so that when it is drawn out to admit anything



—for example, a letter—the article falls to the bottom, and when it is closed again the article is ejected, by a slot in the bottom, into an

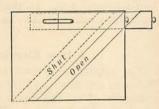


FIG. 2.

under receptacle, which can be kept under lock and key. Money can thus be put by any one into a "safety-till," but cannot be taken out again without the key of the under receptacle. It is to be understood that the drawer only opens out sufficiently to admit the article, which falls down an incline in the first place, and when the drawer is closed, is pushed into the under box. The accompanying figure (Fig. 1) shows one of these boxes fitted to act as an external letter-box, while Fig. 2 shows one of the safety-tills.

# A Ship Stop-gap.

Owing to the great speed of steam-ships the risk of collision is very great, and the device of Mr. Mackie for preventing the inflow of water when a ship is pierced, is deserving of commendation. It consists of a strong water-proof sheet mounted on a frame and drawn over the fracture. The stop-gap is properly strengthened, and, when removed, all the parts fold up for stowage. When placed over the fracture, the device has the appearance of an inverted box; and it permits the damage to be temporarily repaired.

# A New Illuminant.

The "Hydro-photogene" light, recently introduced, is similar to the "Lucigen" light. The oil used is that tar-like residuum which is difficult to dispose of. It is forced into a combustion chamber by water-pressure, and there transformed into inflammable gases which, when mixed with air, burn with a white blaze. The new illuminant is used for lighting factory-yards, engineering works, and the like. The cost of the tar-like oil is 1d. per gallon, and a gallon will burn for two hours with a light equal to that of 2,000 candles. The apparatus is compact and portable.

## Burmese Fibres.

Burmah abounds in fibre-producing plants; the bamboo, China grass, and pine-apple yielding fibres which resemble silk, and require very little chlorine in bleaching. It is probable that a large manufacturing industry will spring up from the treatment of these and other fibres. At present the fibres mentioned are woven into cloth, like silk, by Chinamen in Bhamo, and sold in Rangoon.

#### Snow and Marble.

It has been observed that snow is destructive of marble statuary: and this may be due, in part at least, to the recently discovered fact that snow absorbs sulphurous acid from the atmosphere. This sulphurous acid, according to Herr Sendtner, becomes ozonised into sulphuric acid. In the neighbourhood of gas works the results are likely to be more marked.

# A New Electric Welder.

The apparatus devised by Messrs. Nicolas de Bernardo and Stanislas Olszewaky, of St. Petersburg, is capable of welding metals under circumstances in which that of Professor Elihu Thomson cannot be used. The joint to be welded is in the new process connected to the negative pole of a dynamo, and a carbon pencil connected to the positive pole is brought close to it, so as to fuse the metals in the arc formed between the joint and the carbon. The current passes from the carbon to the metals. Any two dissimilar metals can be welded together in this way. An accumulator or battery may be used in the process instead of a dynamo.



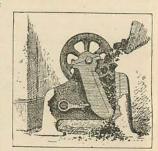
as continuous currents are employed. Boiler plates, metal sheets, and metal castings can be repaired in this manner; metal plates can also be perforated by the arc, and it is remarkable that this operation can be carried on under water, as will be understood when it is remembered that the electric arc, unlike ordinary fire, can be produced under water. The accompanying

figure is from a photograph taken when repairing a boiler, the operator holding the carbon in one hand, and a coloured glass to protect his eyesight in the other.

## A Coal and Coke Crusher.

The apparatus which we illustrate is a simple but powerful little machine, known as the "Acme" stone-

breaker, which can be used for stone-breaking, coal and coke crushing, bone breaking, and so on. It is, therefore, likely to be useful about a house or farm. It is capable of crushing the hardest granite, gold quartz, and other minerals. Coals and coke can be crushed



by it to any required size. Bones can also be smashed for manure. The device is made of all sizes, from the small coal and coke breakers for household purposes, to ponderous twelve-ton machines for use in quarries.

# Gas-lighted Buoys.

The Pintsch gas is succeeding very well as an illuminant for coast buoys and beacons in isolated places. The gas used is made from once-refined paraffin in a small gas-works fitted up in the locality. The gas is transferred to the receiver of the buoy in quantity sufficient to keep the buoy lighted for two months, burning day and night. The flame is protected by a lantern which is proof against wind and waves. Such buoys are placed at the "Ovens," Gravesend Reach, at the East Oare, Sheerness Middle, and Maplin Spit, all dangerous shoals at the entrance to the Thames. The authorities of the Mersey and Clyde navigation have also adopted the buoys at difficult points of navigation. The Garmoyle lightship is now lighted by gas, and the expense of a crew saved. The system is . also in use in many other countries.

## For Girls and Boys.

Only too often is the store of new books exhausted before the long evenings are gone; but this season the supply seems likely to hold out. For girls we have "The Palace Beautiful," by L. T. Meade (Cassell), a charming story that is sure to be popular. And for boys we have from the same source a new edition of "King Solomon's Mines," with illustrations by Walter Paget, which promise to make it a greater favourite than ever with boys.

#### The Old World and the New.

This is the tercentenary year of the defeat of the Spanish Armada, and there is special interest attaching, therefore, to a story of the days of Drake. In "For God and Gold" (Macmillan) we have what purports to be a record of the adventures of Mr. Jasper Festing in the train of Sir Francis Drake upon the

disastrous expedition against Nombre de Dios. We could wish that the incident on which the plot of the story is pivoted had been less open to objection, but the tale is bright and stirring. It is interesting to note that we have in this book, for the first time so far as our reading of stories of this period goes, a recognition of the fact that other than West-countrymen took part in these voyages to the then "New World."

#### New Games.

A collection of new "Games of Patience," by Lady Adelaide Cadogan, is issued by Messrs. Sampson Low and Co. in a very attractive form. New games are always interesting, and there seem to be very good points in some of the pretty games suggested in this work. The author's aim has been rather to give an outline than a finished form, and so her models are capable of a wide variety in treatment.

# "Beauty and the Beast."

An old favourite has been revived by Messrs. Field and Tuer, in "Beauty and the Beast," reprinted in a facsimile reproduction of the type and illustrations of the original edition. The work is accompanied by a preface from Mr. Andrew Lang, who points out that Charles Lamb's title to the authorship of the work is by no means clear. The quaint illustrations are singularly well copied. Mr. Fisher Unwin sends us a second edition of Mr. Palmer Cox's very clever work, "The Brownies: their Book," which would make a handsome birthday gift for any little one.

# The Story of the Irish People.

Everybody has heard of the Irish family in whose pedigree occurred a mysterious break, explained by the legend, "About this time the world was created." In her admirable volume on "Ireland," recently published by Mr. Fisher Unwin in the "Stories of the Nations" series, the Hon. Emily Lawless does not take us quite so far back in Irish history as this family claimed to do. But, as she opens her story with "Primeval Ireland," and concludes with the record of the General Election of 1886, she may be fairly supposed to have covered all the safe ground of her subject. Ireland is so prominently to the fore in the public mind just now, and her story is so deeply involved in the clouds of party-warfare, that we are glad to welcome this impartial story of her people and soil.

## Life in a New Settlement.

So many Englishmen have gone out to the States to seek a new home in one or other of the settlements there, that a special interest attaches to "Harmonia," a story by the author of "Estelle Russell"—which Messrs. Macmillan have recently published—apart altogether from the by no means inconsiderable claims of the tale itself on our attention. Life in Harmonia, which is the name of the new settlement, must have been charmingly Arcadian in some respects, and disagreeably prosaic in others, yet all the settlers

of whom we read seem to have got on well in it, on the whole. There is really no plot to this story, but rather a number of plots grouped round the story of the retired naval officer and his wife who are the nominal hero and heroine of the work. In an English clergyman, Mr. Denning, who is one of the settlers, we have glimpses of a strikingly beautiful character, and one not likely to be soon forgotten.

# Poet and Wit.

The author of "The Vicar of Wakefield" and "The Deserted Village" is assuredly among those "Great Writers" whose fame Englishmen will not willingly let die. Mr. Austin Dobson has told the story of Goldsmith's chequered career, in Professor Eric Robertson's series, published by Mr. Walter Scott. In wealth of anecdote this interesting little biography is worthy of its subject; our only regret is that there is not more of it. Mr. David Hannay has told in the same series the life-story of another writer, Smollett, whose work is now but little read. And it is, indeed, better so, for it is totally at variance with all our modern ideas and modes of thought.

#### Pen and Pencil.

The Japanese style of printing on one side of the paper only, and binding the sheets so that the folded edges are outermost, has been adopted with great success in Mr. Walter Crane's very clever little book, "Legends for Lionel" (Cassell), in which he is both author and artist. A more attractive gift-book for children it would be difficult to find, and we heartily endorse Mr. Crane's wish that "Legends for Lionel" may become "Legends for Legions of Lionels." A more ambitious gift-book, but for older readers, is "Treasures of Art and Song," which is published by Messrs. Griffith, Farran, and Co. The work is arranged by Mr. R. Ellice Mack, and includes contributions of original verse from Mr. F. E. Weatherly and other writers, and pictures by Mr. G. Clausen, Miss Gow, Miss Dicksee, and other artists of note. The illustrations are produced by photogravure, and the result is a most handsome and tasteful work.

## Adventures on the Congo.

There is so much interest attaching to the Congo at the present time, and to its great explorer, Mr. H. M. Stanley, that we are glad to welcome Colonel Knox's book, "The Boy Travellers on the Congo" (Sampson Low and Co.), written at Mr. Stanley's suggestion, to convey to younger readers the information which he himself gave their elders in "Through the Dark Continent." Colonel Knox has done his work well, and the result is a handsome volume, sure to please the boy-public. To say that a story is from the pen of the author of "Lorna Doone" is in itself a high recommendation, but "Springhaven" (same publishers) has other and strong claims on our attention. There are incidents in the story of which we cannot approve, but it is a stirring story of the troublous times when England dreaded an invasion by Bonaparte.