H. Albee, of 101 Pearl Street, New York city, 18 the inventor of this hose coupling.

RAILWAY GAGE.

The method now ordinarily used in railway construction for bringing rails to gage is rather crude. Spikes

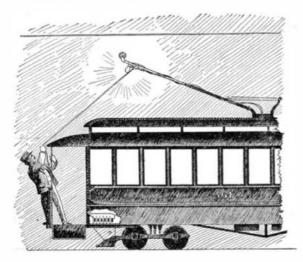


RAILWAY GAGE.

are driven into the ties against the base flanges and crowded either inward or outward to press the rail to proper position. This often results in bending the spikes or in breaking the upper faces of the ties in such manner as to permit water to percolate through to the interior, causing decay of the tie and thus increasing the expense of maintenance. We show herewith a device that greatly simplifies the process of gaging a railway and which avoids the difficulties above noted. The device comprises a drawbar, provided at its outer end with a head, and to the other end the shorter arm of a bell crank lever is pivoted. At the angle of the bell crank lever a claw is hinged. The claw is provided with a head at its outer end. In use, this head and that on the rod are slipped over opposite rails and the bell crank is then operated to draw them together. To prevent the rails from moving in too far, a spreader is provided which comprises a tube or sleeve loosely mounted on the rod. At the end adjacent to the bell crank lever a yoke is attached to the sleeve, and this yoke, at its outer end, is formed with an abutment. An abutment is also carried on the other end of the sleeve, and these are adapted to press against the inner faces of opposite rails. The yoked member serves not only to span the bell crank lever joint, but also to brace the gage laterally and insure its lying squarely across the track. A patent on this railway gage has been granted to Mr. Robert M. Jenkins, of Carney, Ala.

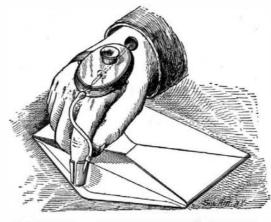
ODDITIES IN INVENTION.

TROLLEY LIGHT.—Evidently the trolley problem has not been solved yet; for the United States Patent Office is still crowded with applications for patents on trolley guards, and the like. But a Western inventor has apparently given up the idea that trolley wheels can be made to stick to the wire, and has endeavored instead merely to alleviate the trouble by providing an electric light near the end of the pole to assist the conductor in replacing the trolley at night. The electric lamp is lighted by a battery located in the body of the car. A switch is interposed in the circuit near the lamp, and to one end of this switch the trolley rope



ber of lamps in the car which serve to illumine the same while the trolley is being replaced.

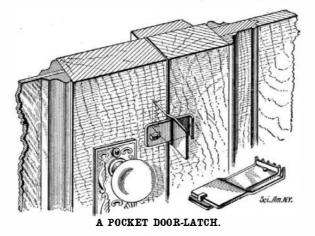
DEVICE FOR MOISTENING GUMMED SURFACES.—The evils of moistening stamps and envelope flaps, particularly in large quantities, with the tongue are too well known to require description here. The accompanying engraving illustrates a rather clever device for avoiding this disagreeable and unsanitary practice. Strapped to the back of the hand is a water reservoir, from



DEVICE FOR MOISTENING GUMMED SURFACES.

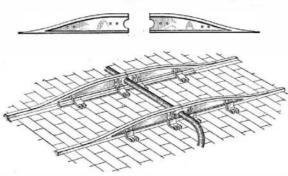
which a tube leads down to a thimble on the first finger. The flow of water in the tube is controlled by a needle valve operated by a thumbscrew at the upper end of the reservoir. The water is taken up by a suitable absorbent material on the thimble. Capillary attraction, as well as the force of the water falling through the tube, insures a steady feed to the thimble, which serves as an ever-moist finger for moistening the gummed surfaces.

A POCKET DOOR-LATCH.—A simple little pocket device has recently been invented, which may be applied to a door to secure it in closed position. The device consists of a bolt and a jaw member. The latter is formed with teeth at one end adapted to be sunk into the door jamb. The other or projecting end is formed



with a slot to receive the bolt, which may be operated in the usual way to bolt the door shut. Our illustration shows how the device may be folded so that it can be readily carried in the pocket. This little latch will be found very useful for traveling men, who are often obliged to spend the night in suspicious and even dangerous lodgings.

FIRE-HOSE PROTECTION FOR CAR TRACKS.—The stoppage of street cars in time of fire, due to stretching the fire hose across the car tracks, is a matter of great annoyance, if not expense, to the passengers. This is sometimes avoided by elevating the hose sufficiently to permit cars to pass under it. A simpler arrangement is to elevate the track over the hose, as indicated herewith. An auxiliary track is provided, consisting of two pairs of abutting rails, in which openings are



When a young man he succeeded in getting the British government interested in the construction of paper mills at Kingston, Jamaica, for the manufacture of paper from wood fiber. Returning to the United States, he gave his attention to electrical matters, and at once took a foremost place among the workers in this field, winning medals and commendation from the American Institute Fair, S. F. B. Morse, and the British government. In 1884 he was awarded a patent on paper insulation for electrical wires, and engaged in the manufacture of it, which developed into a very extensive business. For a long time this wire was used exclusively in the conduits carrying wires under the city streets.

THE NEW TRADE MARK LAW.*

Some weeks ago we published in the SCIENTIFIC AMERIGAN an article by Mr. A. P. Greeley upon the new trade mark act, which since that time has become a law and will go into effect on April 1, 1905.

The various advantages of the new act were pretty well set forth in this article by Mr. Greeley, who has been so intimately identified with the enactment of the new law.

He has recently published a brochure on the new act, which sets forth the brief history of the legislation leading to the enactment of the new law, with a statement of the various bills which have been presented to Congress during the past few years, but which failed of passage. The advantages derived from registration have now become so great, that it is evident manufacturers will make exclusive use of the new privileges under the act. The largely increased damages which it is possible to obtain for infringement of trade mark under the statute render registration desirable, as it is possible to obtain recovery to the amount of three times the damage done. Furthermore, in case registration is refused and an appeal is taken from the decision of the Examiner, it may then be carried to the Commissioner of Patents, and from there it may be carried to the Court of Appeals for the District of Columbia, a most desirable procedure.

Under the new law it is possible, under certain conditions, to obtain registration for marks of a nontechnical character, which would not have been permitted to be registered under the law of 1881. This is a very important feature of the new act.

Under the provisions of the new act it will be possible to register the trade mark actually used, and it will not be required to restrict the application to particular features, so that the question of infringement will be, as under common law, a question whether the alleged infringing mark so far resembles the trade mark used by the registrant as to deceive purchasers. We quote the following: "But while the new act does not compel registration of unregistered marks, and does not compel re-registration of marks previously registered, the provisions of the new act are such that the owners of unregistered trade marks entitled to registration under the new act will find that the advantages resulting from registration will be so important that they cannot afford to fail to register, and the owners of trade marks registered under the act of 1881 will probably find it worth, while to re-register under the new act for the sake of securing the additional remedies against infringers given by the new act; though, unless they consider these additional remedies given by the new act necessary for the protection of their rights against infringers, there is no need to re-register, as the certificates of registration issued to them under the act of 1881 are still effective as record

evidence of *prima facie* right to the registered marks and as sufficient evidence to compel the Patent Office to refuse to register the same mark to others." Mr. Greeley points out another feature of the act, which is also of practical importance namely that it

Mr. Greeley points out another feature of the act, which is also of practical importance, namely, that it will now be possible for trade marks which have been refused registration under the old act to be revived; and as there is no provision of the new law under which an application for registration is held to be abandoned by failure to prosecute, it will be possible to renew the application for the registration of such marks without the payment of a further government fee. It appears that this provision will apply not only to pending applications, but to such as may have been rejected. One of the advantages that will be especially welcomed by the owners of trade marks will be reduction in the government fee for registrations from \$25 to \$10.

TROLLEY LAMP.

is attached. Normally this switch is held open by a spring; but when the conductor pulls the rope to draw down and replace the trolley, the switch is closed, lighting the lamp, and thereby facilitating the work of placing the wheel in proper contact with the wire. Connected in series with the trolley lamp, are a num-

FIRE-HOSE PROTECTION FOR CAR TRACKS.

formed at the abutting ends to receive the hose. The rails when joined form an arch leading from the main track over the fire hose. Simple means are provided for clamping this auxiliary track in position.

Edward Dodd McCracken, who died at Leonia, N. J., on December 13, aged sixty-six years, was a genius of a rare type. His father was a paper maker, and the son was associated with him in that business for some time, during which period he was responsible for a great many improvements in paper-making machinery. In summing up, Mr. Greeley makes the following statements:

"The new act thus, while not *compelling* registration in the sense of abrogating or lessening the common law right, makes it necessary for the owner of an unregistered mark to register it if he wishes to avoid the possible expense of overcoming the effect which may arise from its registration by another. In this sense the provisions of the new act respecting the publication of applications for opposition would seem to have an effect to make registration practically compulsory."

* Registration of Trade Marks under the New Trade Mark Act, by Arthur P. Greeley. John Byrne & Co., publishers, Washington, D. C. Price, 50 cents.