Scientific American

ing adjustable. Passing longitudinally through the blocks B is a rack bar C, the forward end of which projects beyond the toe and terminates in a forked jaw E. Mounted to slide on the rack bar C is an arm D, which rises to about the height of the ankle of the user and then curves around until it terminates in a jaw F diametrically opposed to the jaw E but some distance above it. The jaws E and F are fitted with rubber pads to provide gripping surfaces when climbing iron poles. The rubber pads may be removed when the climbers are to be used on wooden poles. Mounted on the arm D is a spring-pressed pawl G, adapted to engage the teeth of the rack C. By adjusting the arm D along this rack the distance between the op-

posed jaws may be varied to suit different poles. The user by throwing his weight on one foot will bind the jaws of this shoe against the pole. Thus supported, he can release the jaws of the other shoe by raising his heel to increase the diametrical distance between the jaws. This foot is then carried upward and the jaws automatically engaged with the pole by throwing his weight upon it. Thus the

climbing proceeds. A patent on this improved poleclimbing shoe has been secured by Messrs. C. F. and C. G. Youngquist, of 912 Michigan Street, San Francisco Cal

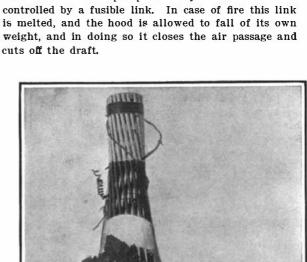
A NOVEL ADVERTISING DEVICE.

While advertising methods have reached a high development along certain lines, in one direction at least there seems to have been little improvement. Ugly signboards continue to deface the city skyline and mar the landscape along railroads and prominent highways. It is useless to attempt to do away with this form of advertising. Legislation has failed to stop it. It has come to stay. But it can be improved, and competition will compel improvements when a start is made in the right direction. Already attempts have been made to relieve the monotony of signboard scenery by cutting the signboard to the form of the article that is advertised. A further improvement, particularly adapted for advertising beverages, has been devised by Mr. Herman Soellner, of 81 Pilling Street, Brooklyn. N. Y. It consists in constructing a large frame of bottle form to represent a gigantic bottle, and training vines to grow on the frame. One of these novel advertising signs was recently erected in a popular picnic ground in this vicinity. The accompanying photograph of the device shows the huge proportions of the bottle. It is thirty-two feet high, and measures six feet ten inches in diameter at the base and three feet in diameter at the mouth. A modest label is the only lettering on the bottle, and without detracting from the appearance of the novel sign gives due prominence to the advertiser. Vines are being trained on the framework, and doubtless will soon con-

ceal it entirely. Carrying out the same idea, a large bottle trimmed with artificial vines as in the accompanying engraving, or covered with climbing flowers planted in a pot behind the bottle, makes an attractive indoor advertising device. A patent on these methods of advertising has been se-

vibration materially abated. In the accompanying engraving, one of the figures shows the improved wheel complete, and the other, which is a cross section through the rim, shows the details of construction. The rim A of the wheel is provided with a central annular flange. In this flange and in the main body of the rim at either side of the flange annular grooves are formed, which serve as seats for the pneumatic tubes B. The rim C of the wheel is provided with seats, which bear against the tubes B at the center and outer side of the wheel. A side section D, which is fastened to the tire section C, and bears against the inner pneumatic tube and the inner side of the central pneumatic tube, serves to hold the tire section to the wheel and prevent it from being moved laterally off toward the outer side. The section D is held in place by a series of countersunk screws E. The space which separates the rim A from the tire section C and side section D is covered by a pair c_{1}^{s} sinular covering flaps F.

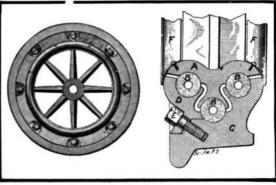
One can hardly look out of a window in contemplation of the roofs without seeing a number of metalhooded ventilators, which have come into general use for the purpose of creating an air current in lofts or air chambers. The only disadvantage connected with their use is that in case of fire they act as a chimney and aid materially in the spread of the flames. In a recent improvement made in these ventilators, the hood is held in an open position by a lever movement cuts off the draft.



CUSHIONED CAR WHEEL.

SEPTEMBER 14, 1907.

With a view to reducing noise in city streets, Mr. Benjamin Gastal, of Pelotas, Brazil, has devised an improved wheel adapted to be used on all classes of vehicles, but more especially on street and railroad cars. Of course, the ordinary expedient of equipping the wheels with pneumatic tires is not applicable to wheels which travel on rails, but Mr. Gastal has invented a special form of wheel, in which the pneumatic cushion is placed between the rim and a flanged tire, so that without changing the character of the tread surface, the wheel is cushioned and the usual noise and



CUSHIONED CAR WHEEL,



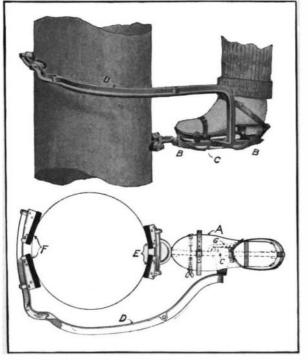
A CONVENIENT TYPE OF PIPE-HANGER.

two parts, one adapted to fit under the pipe and the other over it. The general form of the two members is indicated in the engravings, one cut showing the parts separated to receive a pipe and the other showing the parts fitted together in position to hold the pipe. Both parts of the hanger are stamped out of sheet metal, bent to U shape in cross-section. The Ushaped walls of the inner member of the hanger are adapted to snugly fit within the walls of the outer member. Both of the members are provided with foot extensions at each side, and on the extensions of the inner member prongs are formed, which are adapted to be driven into the support. In addition to this, the inner member is held in place by nails driven through the extensions. After the pipe is seated on the inner part the outer member is fitted into place and fastened with a couple of screws which pass through the foot extensions of both parts. When desired the outer part may be readily removed without disturbing the position of the inner part. Owing to the simple form of the two members, the hanger can be economically manufactured and the U-shaped form of the stock renders it very strong. Mr. W. D. Van Brunt, of Southampton, N. Y., has recently procured a patent on this improved pipe-hanger.

IMPROVED POLE-CLIMBING SHOE,

In the accompanying engraving we illustrate an improved type of climbers, adapted for the use of linemen and others, in climbing wood or metal telegraph, telephone, flag poles and the like. The ordinary climbers are provided with spurs, which are driven into the pole to support the lineman. Such climbers obviously can not be used on metal poles and even on wooden poles do not always furnish a perfectly secure foothold. These deficiencies are overcome in the new climbers, which also enable the lineman to ascend and descend the pole with greater facility and less exertion.

The device comprises a foot-plate A, slightly depressed at the heel to prevent the foot from slipping when strapped thereon. A pair of blocks B are secured to the foot-plate, one at the heel and the other at the toe. Each block carries a pair of jaws adapted to engage the sole of the shoe, the jaws at the toe be-



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A CONVENIENT PIPE-HANGER.

proved split pipe-hanger, adapted for attaching a pipe

to a wall or other support. The hanger is of very

simple but strong construction and may be conve-

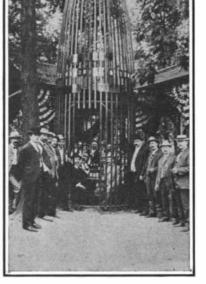
niently adjusted to support the pipe. It consists of

Pictured in the accompanying engravings is an im-

IMPROVED POLE-CLIMBING SHOE.

cured by Mr. Soell ner.

Pouring Mixture for Imitation Cameos. - Litharge 50 parts by weight, concentrated glycerine 15 parts, intimately mixed by stirring, is poured into the molds and allowed to stand until it solidifies. By the addition of ochers, ultramarine, etc., this pouring mixture can be colored as desired.





A NOVEL ADVERTISING DEVICE.