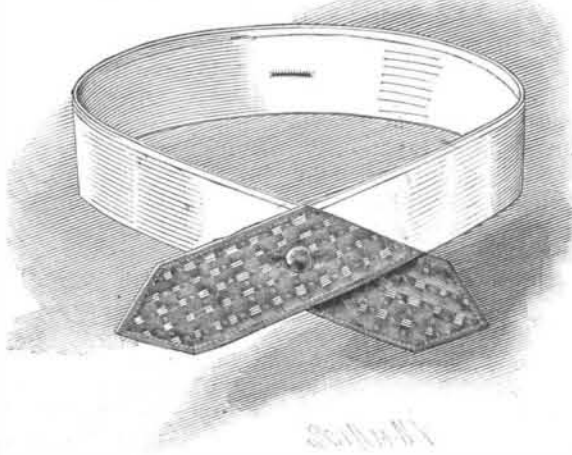


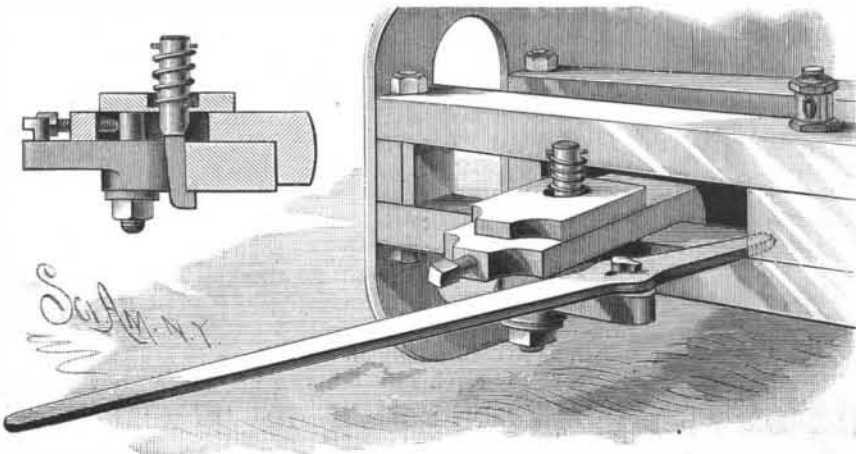
COMBINED COLLAR AND NECKTIE.

In the invention here illustrated the collar and necktie are so combined as to render unnecessary the use of a separate necktie. The collar may be made of linen, celluloid, zylonite, or other suitable material, and is provided with buttonholes for attachment to the neckband of a shirt. At the front of the collar is a necktie,



DOVE'S COMBINED COLLAR AND NECKTIE.

which is formed of tabs which are continuations of the ends of the collar, or are made separate and secured to the collar by sewing or otherwise. The ends cross each other, so that the points project downwardly and laterally, after the manner of a necktie. When a white collar is employed, and the tabs are made of the same



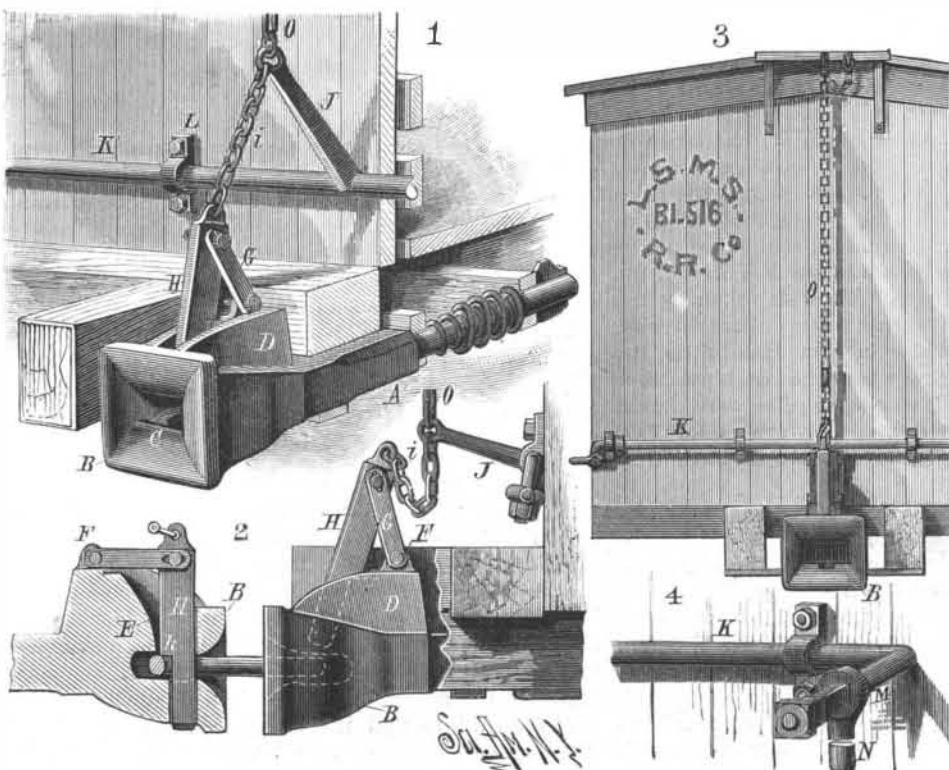
MCINTOSH'S CROSSHEAD PUSHING DEVICE.

material, they may be printed or otherwise colored in imitation of necktie material; or necktie material may be used, when the tabs are made separate from the collars. The front buttonholes are made in a diagonal direction in relation to the length of the collar, so that when the latter is buttoned they will assume a horizontal position on the neck.

This invention has been patented by Messrs. John S. Dove and John S. Dove, Jr. Particulars concerning the sale of the patent can be had by addressing the latter at 833 Reed Street, Philadelphia, Pa.

CROSSHEAD PUSHING DEVICE.

In a steam engine it is frequently necessary to move the crosshead and its connections without the aid of steam. The device herewith illustrated accomplishes



STONE'S IMPROVED CAB COUPLING.

this object, and is adaptable to the various shapes and forms of guide bars in engines and locomotives. The device consists, principally, of three parts—a clamp attachable to the guides, and having a reversible crank arm pivoted to it, and a lever fulcrumed on the crank arm. The clamp is provided with an angular bar, having a slot through which passes an angular clamping pin, on which is a coiled spring arranged as shown in the sectional view. A stud also passes through the slot, and is provided at one end with a plate having an aperture through which the pin and its spring pass. On the stud turns a crank arm, provided on its outer end with a pin having a lug. The operating lever is formed with an aperture and a notch, which fit over the pin and its lug, the latter preventing the removal of the lever when the lug and notch are out of line with each other. A set screw screws on the end of the angular bar and against the stud.

The operation of this device is as follows: The angular bar and clamping pin are fitted on one of the guides in which slides the crosshead to be moved. The pin can be adjusted to any thickness of guide, as the spring yields accordingly, and it can also be set to any width of guide by adjusting the set screw. The lever is then placed on the pin on the crank arm, so that its end rests against the crosshead, which can then be shifted by moving the long arm of the lever. As the inner side of the crank is slightly beveled, it acts as a cam against the clamping pin, and thereby holds the latter securely against the guide, and also prevents the crank from moving outward. The crank arm can be used on either side of the clamping bar. The crosshead can, by this means, be moved to any distance, forward or backward. This invention has been patented by Mr. William McIntosh, of Huron, Dakota.

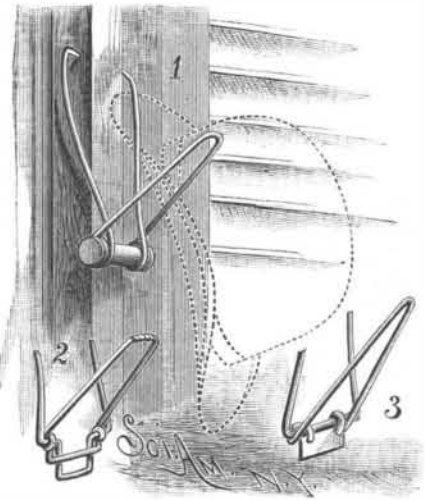
IMPROVED CAR COUPLING.

The car coupler herewith illustrated may be manipulated from either side or from the top of the car when uncoupling. The coupling of the cars is effected automatically, and when desired the coupling pins may be locked in their withdrawn position above the link recesses of the drawhead. The drawhead, B, is formed with a recess, C, which, as usual, has a flaring mouth. In the lower side of the recess, at the point of juncture of the recess proper and its flaring mouth, is an

upwardly extending ridge, which is considerably higher than the bottom of the recess. Upon the upper face of the drawhead is a boss, D, through which passes a vertical recess, E, the rear wall of which forms a gradual curve from the link recess to a horizontal shoulder formed upon the upper face of the boss just in advance of a lug, F, through which is held a bolt that forms a support for two connecting links, G, as shown in the sectional elevation, Fig. 2. These links serve to guide and partially support the coupling pin, H, which is formed with a shoulder, h, and is connected by a small chain, i, to an arm, J, which is rigidly connected to a rock shaft, K, mounted in brackets on the end of the car. Each end of the shaft is bent to form lever arms, M, Fig. 4, provided with handles, N, so arranged that they may be thrown into or out of engagement with squared portions of the arms. The chain, O, Fig. 3, is provided in order that the brakeman, when standing on top of the car, may raise the coupling pin. The proper link of this chain may be placed over a hook, to hold the pin in a raised position. This hook is so formed as to have sufficient strength, or grip upon the chain, to hold the pin raised and at the same time to permit the release of the chain when pulled. It is not necessary, therefore, for the brakeman to be on the roof of the car in order to release the chain.

When the cars are to be coupled, a link is placed in one of the drawheads and arranged so that the

shoulder of the coupling pin will rest upon its inner end (as shown at the left in Fig. 2) and cause it to extend outward at an upwardly inclined angle, the weight of the link being carried by the ridge in the bottom of the



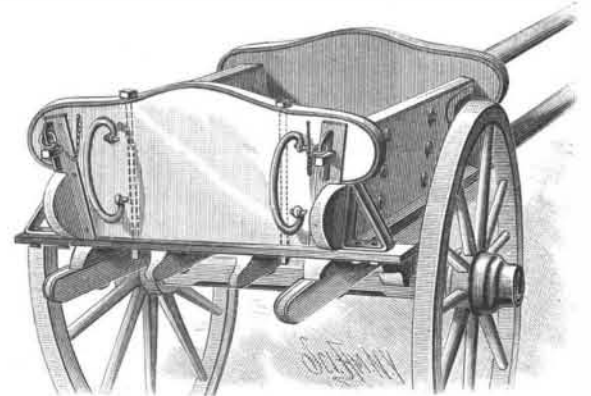
ATWOOD'S HAT HOLDER FOR TRAVELERS.
[FOR DESCRIPTION SEE PAGE 228.]

recess, C. The opposite coupling pin is placed in position, shown at the right in Fig. 2, with its shoulder resting upon the horizontal shoulder of the drawhead. As the cars come together, the shock or jar will dislodge the pin, which will fall through the link and couple the cars. To uncouple the cars, the rock shaft is turned to raise its arm, J, and withdraw the pin, and if it is desired to secure the pin against being accidentally returned to the link recess, one of the operating handles is moved so as to extend downward from its lever arm, when the shaft will be held to prevent its arm moving downward. It is evident that all the movements of this coupling may be accomplished from either side or from the roof of the car. In this form of coupler, owing to its solidity and the simplicity of its construction, as shown in the engraving, there is no liability of disarrangement and breakage, while in use there would be found less than the usual effects of wear.

This invention has been patented by Mr. Dudley G. Stone, of Negaunee, Mich., to whom railroad companies, car builders, and others interested may apply for rights of manufacture and of use.

IMPROVED DUMPING CART.

The object of this invention—which has been patented by Mr. T. J. Flanigan, of Butte City, Montana—is to provide a cart body that will successfully withstand the wear and tear incident to the carting of



FLANIGAN'S IMPROVED DUMPING CART.

stones and minerals, and the tail board of which may be readily removed when it is desired to dump the load. The rigidity and stability of the body are increased by auxiliary sills placed beneath the usual side ones, and the extending ends of which are bound with metal bands. The rear cross bar is of iron, and is securely connected to the sills and intermediate beams; to the projecting ends of this bar are secured braces which support the side boards. The forward end of the cart consists of a board held to the forward cross bar by bolts. The side boards are held to this board by U-bolts, secured to the outer faces of the side boards in such a way that their ends pass through the front board and receive nuts. The side boards and front board are bound by metal strips, and the tail board is bound with metal, and is held from checking or splitting by bolts passed through it; the inner ends of these bolts are elongated, so as to enter slots in the rear cross bar when the tail board is in position. The tail board is held in place by circular retaining irons secured to the side boards, and the ends of which pass through apertures in the tail board, and are slotted to receive pins connected by chains to the board. The outer face of the tail board is provided with handles. This cart, owing to its peculiar construction and numerous metal facing strips, and the metal cross bar at the rear, is well adapted to withstand the wear and tear due to the handling of minerals or stone.