May 17, 1927. 1,628,650

J. L. BUCHANAN

SPREADER TOOL

Filed Oct. 27, 1925

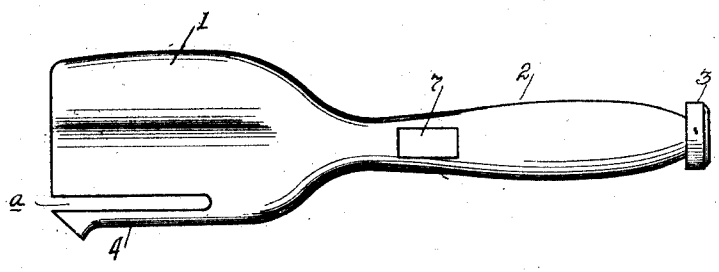


Fig. 1.

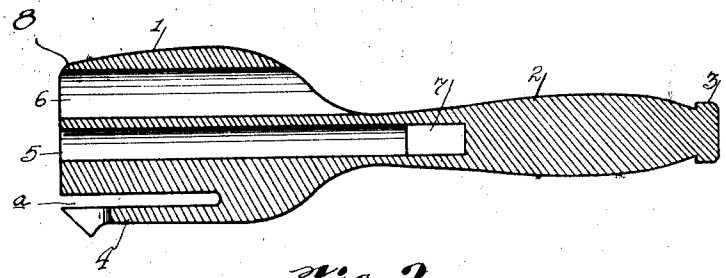


Fig. 2.

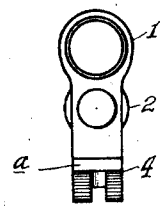


Fig. 3.

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UNITED STATES PATENT OFFICE.

JAMES LEE BUCHANAN, OF WACO, TEXAS.

SPREADER TOOL.

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This invention relates to tools particularly adapted for use by railway car inspectors, and those termed car repairers whose duties are to apply routing, content and capacity cards to railway freight cars, and the invention especially refers to a combination cotter-pin and split key spreader, combining a tack hammer and a tack puller.

The principal object of the invention resides in the provision of a tool of the character and purposes designated, of a permanent and economical construction, and capable of substantially reducing the time required in replacing impaired cotter-pins and keys, removing and retacking cards, and attending to other minor details in connection with railway freight cars.

With these and other objects and advantages in view, the invention has particular reference to its utilitarian features, made possible through the peculiar shape and construction thereof, which will be manifested in the following detail description and illustrated in the accompanying drawing wherein:

Fig. 1 represents a side elevational view of a device constructed according to the invention,

Fig. 2 is a similar view in longitudinal cross-section, and

Fig. 3 is an end view of the tool.

Proceeding now more in detail with the invention, and using similar characters of reference; the invention constitutes primarily a body constructed of substantial metal, and is composed of a head portion 1 and handle 2. Integral with the butt of the handle 1 is a ball 3 for the purpose of driving tacks and the like.

The head, as apparent in Fig. 2, is so formed as to produce a tongue 4, having a bifurcated end as shown, arranged to be of use in pulling tacks. Above the tongue 4, the head is provided with parallel longitudinal bores 5 and 6 of different diameters. The bore 6 extends throughout the length of the head as shown, so as to be open at both ends, while the bore 5, being in alinement with the handle 2, extends a limited distance into the handle, where an opening 7 is made therein. These openings in the tools prevent accumulations of dirt and rust within the bores.

Split keys and cotter-pins, used upon the brake rods and other equipment of a freight car, have heretofore been spread by a chisel and hammer, and since this method has proved to be troublesome and otherwise unsatisfactory, the tool described herein has been contrived to expeditiously perform these duties. Accordingly and in operation, the edge 8 is inserted or wedged between the two legs of the cotter-pin so that one of the legs will enter the bore 6, whereupon the tool is given a turning movement with its head as a fulcrum to bend the leg about or against the object to which the pin is connected. The tool is then released and similarly applied to the other leg of the cotter-pin and the operation repeated. The bore 5 is likewise employed in a corresponding capacity in the instance of pins, the legs of which are of less diameter.

The slot at *a*, forming the tongue 4, is adapted to be applied in securing the conventional split key employed in the car equipment, and this is accomplished much in the same manner as with the cotter-pin. One side or leg of the split key is inserted into the slot, and by properly moving the tool, a spreading action, combining a circular twisting action is imparted to the key, making accidental release thereof practically impossible, and at a saving in time.

Cards bearing descriptive matter are tacked in great numbers to the sides of the railway cars carrying freight. These cards are usually applied by an ordinary tack hammer, and consequently a great number of tacks are left in the walls of the car. In using the described tool for this purpose it is required only to insert the bifurcated end of the tongue 4 under the tack to remove the same. The card is placed and the tack set while in position within the end of the tongue, and driven by striking the same by the ball 3 on the end of the handle 2. In this manner it is not required that the tack be held with the hand while being set.

It is very obvious that a considerable saving in time is brought about by using the tool, as well as the several other advantages hereinbefore described combined into a single tool of lasting qualities and economical manufacture.

What is claimed is:

1. A spreader tool for cotter-pins, split keys and the like, embodying a body having a head and a handle, said head having a longitudinal bore extending through one end thereof and of a diameter to receive either leg of a cotter-pin or the like, whereby to

effect bending of the leg about the object to which the pin is secured by a turning of the body with its head as a fulcrum, said body having a tapering edge one wall of which is formed by a part of the wall defining said bore so as to provide a wedge-like part engageable between the legs of the pin to initially spread the same.

2. A spreader tool for cotter-pins, split keys and the like, embodying a body having a head and a handle, said head having a plurality of substantially parallel and adjacent bores extending through an end thereof and of a diameter to receive either of the legs of the pin or the like, whereby to effect bending of the leg about the object to which the pin is secured by a turning of the body with its head as a fulcrum, said body having a tapering edge adjacent one of said bores so as to provide a wedging action between the parts of the object worked upon.

In testimony whereof I affix my signature.

JAMES LEE BUCHANAN.