

(No Model.)

A. ASSORATI.
SPIKE.

No. 525,576.

Patented Sept. 4, 1894.

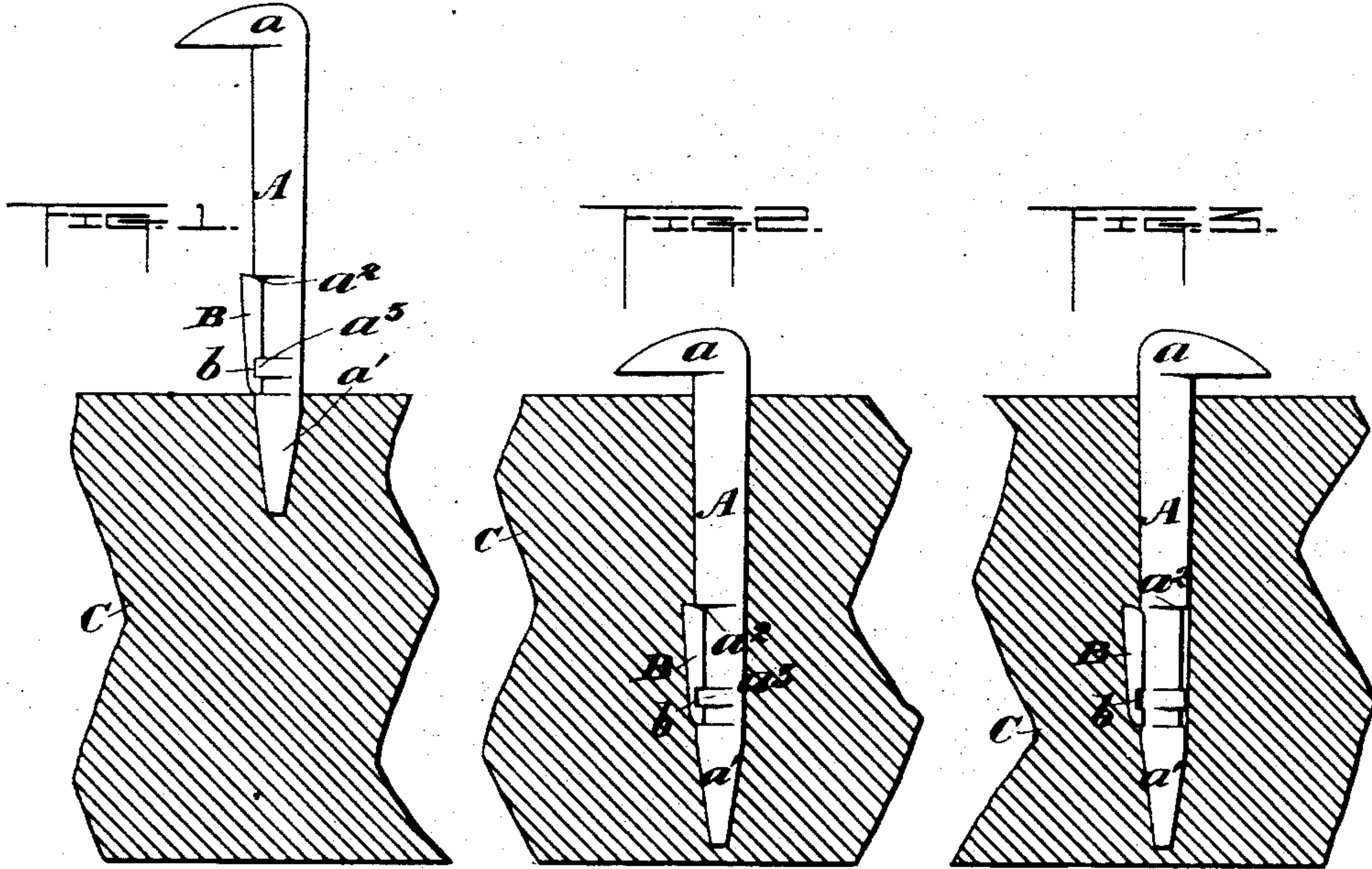


FIG. 4.

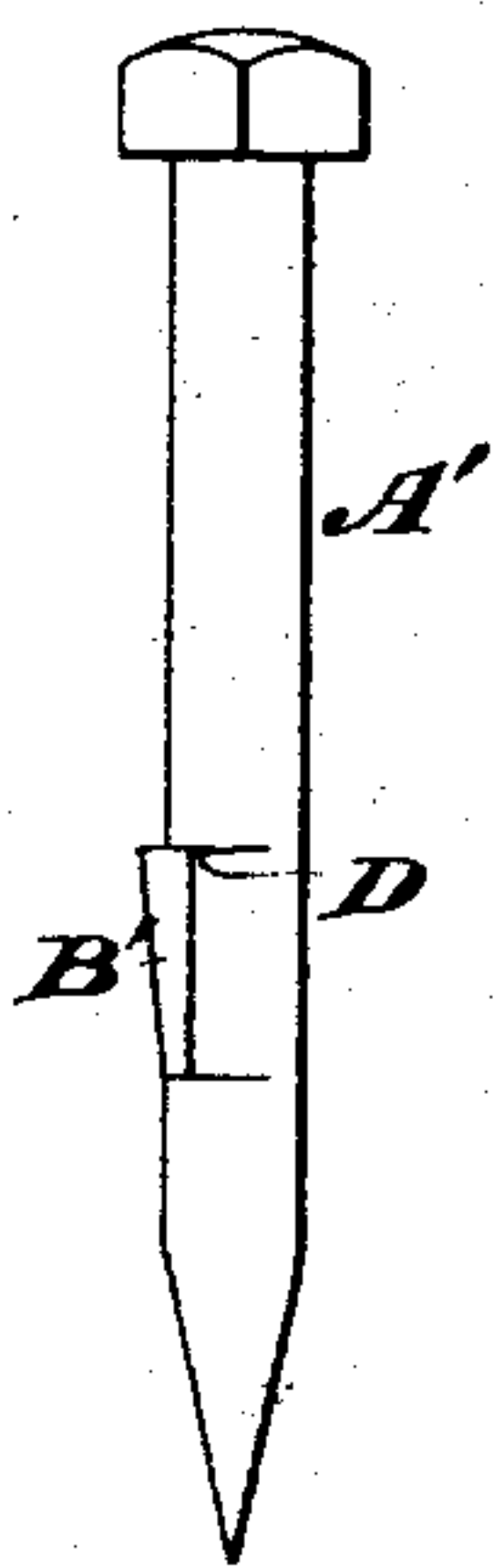


FIG. 5.

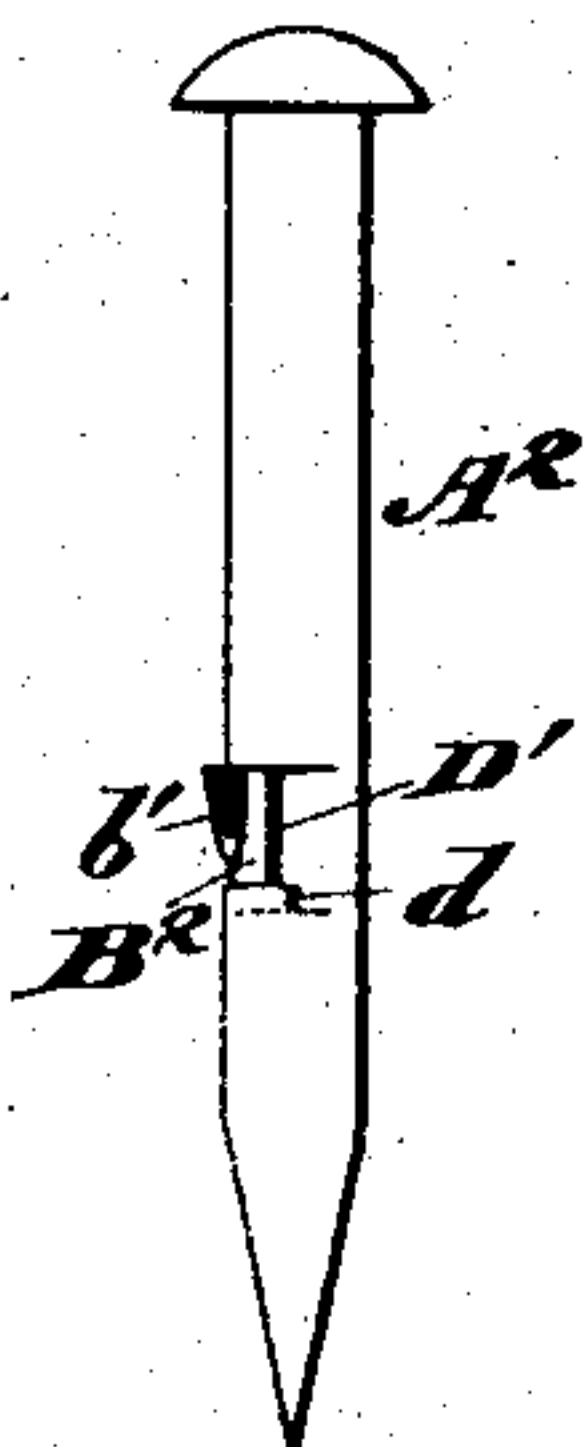
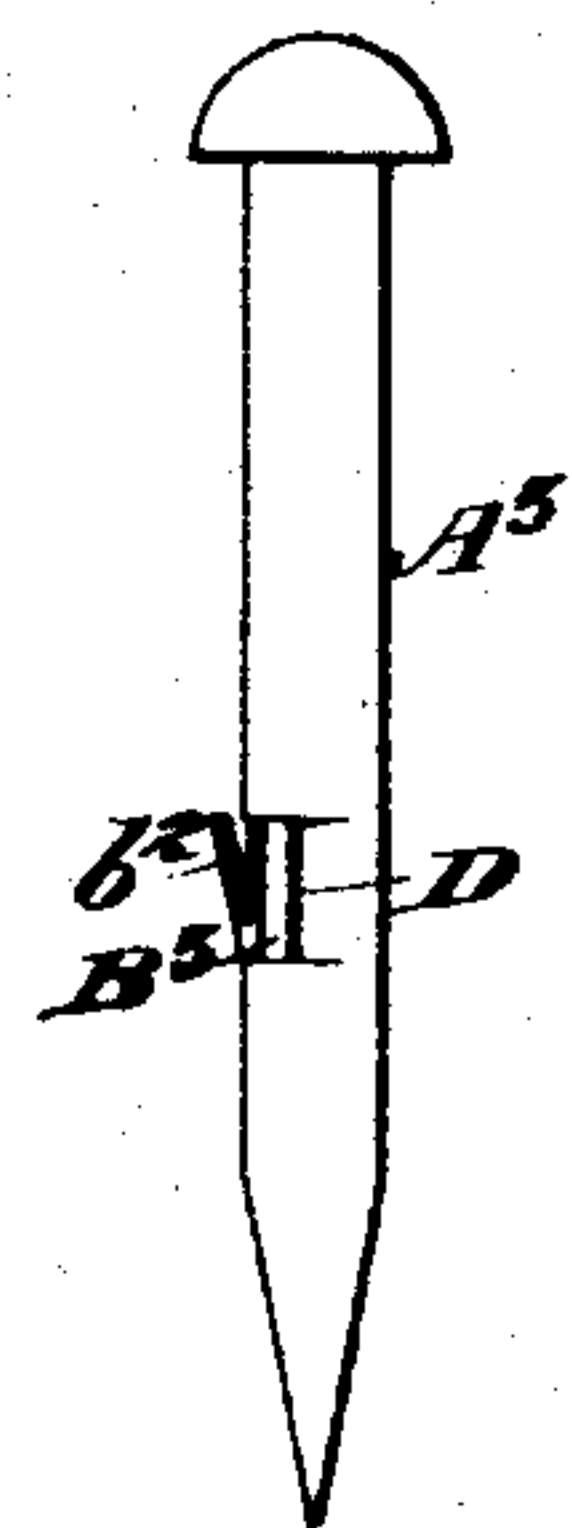


FIG. 6.



Witnesses.

A. Howard.

George Barry.

Inventor.

Antenor Assorati

by attorneys.

Brown & Newell

UNITED STATES PATENT OFFICE.

ANTENOR ASSORATI, OF NEW YORK, N. Y., ASSIGNOR TO RAFAEL R. GOVIN,
OF SAME PLACE.

SPIKE.

SPECIFICATION forming part of Letters Patent No. 525,576, dated September 4, 1894.

Application filed January 4, 1894. Serial No. 495,590. (No model.)

To all whom it may concern:

Be it known that I, ANTENOR ASSORATI, a resident of New York, in the county and State of New York, have invented a new and useful
5 Improvement in Spikes and Nails, of which the following is a specification.

My invention relates to an improvement in spikes and nails in which provision is made for locking the spike or nail against liability
10 to unintentionally work out of the wood or other material in which it is driven and at the same time permit of ready intentional removal.

My invention is also applicable to the
15 shanks of files or other tools which are commonly inserted in wooden handles and in general to any fastening device which is adapted to be driven into a more or less yielding substance.

20 In the accompanying drawings, Figure 1 represents a railway spike, partially driven into a railway tie. Fig. 2 shows the same when driven home. Fig. 3 represents the same when turned in its socket to permit it
25 to be withdrawn and Figs. 4, 5 and 6 represent modified forms of ordinary spikes or nails.

Referring to Figs. 1, 2 and 3; A represents the body of the spike, a its head and a' its
30 point. Intermediate of its head and point—preferably in proximity to its point—the body A is provided with a slight recess a^2 formed on one side of the body so as to leave a shoulder at the upper and lower end of the recess
35 and a short distance from the lower end of said recess there is formed a laterally extending rib or lug a^3 projecting laterally from the bottom of the recess.

A separable spur B, gradually diminishing
40 in size from its upper to its lower end, is fitted on its side toward the body of the spike to seat within the recess a^2 with its larger upper end projecting out of the recess and it is provided with a notch b near its lower end
45 to receive the rib or lug a^3 on the body of the spike. The lower end of the removable spur B is, when the parts are assembled, intended to extend outwardly only about even with the body of the spike, adjacent to the recess, and
50 the side of the spur B toward the spike is

preferably curved to conform to the rounded body of the spike.

From the above structure, it follows that when the spike is driven into the tie C it will force the spur B along with it but the pro- 55
jecting upper end of the spur will form an obstruction to the removal or working loose of the spike, so long as it retains its position locked to the body of the spike. When, how-
60 ever, it is desired to draw the spike from the wood, it may be turned half round in its socket into the position shown in Fig. 3, which movement will throw the spur B out of en-
65 gagement with the recess in the body of the spike, the latter being then free to be with-
drawn from the tie.

In the form shown in Fig. 4, the body A' of the angular headed nail is provided with a recess D which has no rib or lug projecting from the bottom of the recess and the spur B' 70
is forced into the wood, together with the body of the nail, simply by its bearing against the shoulder at the upper end of the recess D.

In the form shown in Fig. 5, the body A^2 of the nail is provided with a recess D' , having 75
at its lower end an under-cut d in which the lower end of a metallic spur B^2 is received. The spur B^2 is conveniently formed by a piece of thin metal, turned from its upper end downwardly and then upwardly, as shown 80
at b' .

In the form shown in Fig. 6, the body A^3 of the nail is provided with a recess D quite similar to the recess formed in the body A' , shown in Fig. 4, and the metallic spur B^3 is formed 85
in a manner quite similar to that represented in Fig. 5 with the exception that the return bend b^2 is extended downwardly to the lower end of the body portion of the spur.

In the form shown in Figs. 1, 2 and 3, the 90
removable spur will require to be held in position until the point of the spike has entered into the material into which it is driven, far enough to hold the spur in place. The same will be true of the form shown in Fig. 4, but 95
in Figs. 5 and 6—particularly the form shown in Fig. 5—the metallic spur will have sufficient frictional contact to hold itself in position while the nail is being driven.

By the above construction, I am enabled to 100

secure the retaining advantages of a spur on the body of the nail and at the same time am enabled to secure the advantages of a smooth body nail for purposes of removing it from its driven position.

What I claim is—

1. The combination with the body of a fastening device adapted to be driven into more or less yielding material and provided with a recess in one of its sides terminating in shoulders at its opposite ends and opening freely to the body of the spike at its opposite sides, of a removable spur fitted to seat against the body of the fastening device within said recess and having an engagement with the upper and lower ends of the recess to prevent its displacement in a longitudinal direction,

the body of the spike being free to move in a rotary direction to carry the spur out of said recess, substantially as set forth.

2. The combination with the body of a fastening device adapted to be driven into more or less yielding material and provided with a recess in its side and a rib or lug projecting from the bottom of the recess, of a removable spur fitted to seat within the recess in the body of the fastening device and provided with a notch adapted to receive said rib or lug on the body of the fastening device, substantially as set forth.

ANTENOR ASSORATI.

Witnesses:

P. PIOVERNINI,
FREDK. HAYNES.