

A. G. LAMB,
BRAD HOLDER AND SET.
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952,571.

Patented Mar. 22, 1910.

Fig. 1.

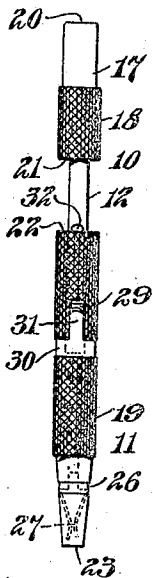


Fig. 2.

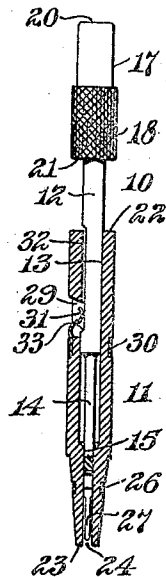


Fig. 3.

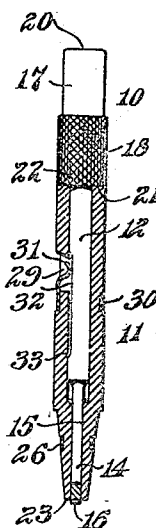


Fig. 4.

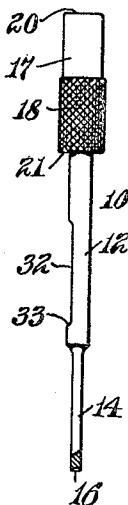


Fig. 5.

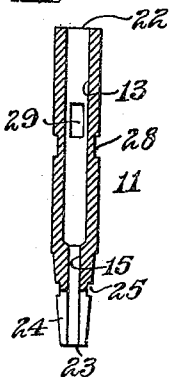


Fig. 6.

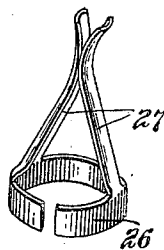
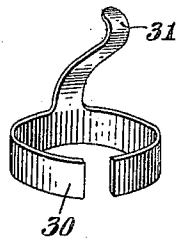


Fig. 7.



Witnesses:

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BRAD HOLDER AND SET.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, AMHERST G. LAMB, a citizen of the United States, residing in Torrington, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in Brad Holders and Sets, of which the following is a specification.

This invention relates to brad holders and sets and affords a device whereby a brad may be held for receiving the blow for driving and setting the same.

It is extremely difficult in doing work requiring the use of brads to start them and drive them properly into the work, particularly is this the case where the brads are to be driven in situations and where it is difficult to gain access with a hammer or in fact with the hands for holding the brad. In any position, however, it is difficult to hold and strike it with the hammer.

This invention, as its title would indicate, is for a tool not only for the purpose of holding the brad for receiving the driving blow but also one constituting a set which will force the brad into the work and then properly set it. As the same instrument drives and sets the brad, the liability of marring the surface around the head of the brad is done away with, it being well known that it is at times difficult to get a nail set right on top of a very small nail or brad. The device also saves considerable time which would otherwise be consumed in using a Bradawl, then a hammer, and then a nail set.

In the drawings accompanying and forming a part of this specification Figure 1 is an elevation of a practicable embodiment of a form of my invention, the brad set portion is shown as retracted in the handle or holder in its brad receiving position. Fig. 2 is a view showing the parts in the several relative positions they occupy in Fig. 1 but with the tool given a quarter turn and the holder shown in longitudinal section, the active part or setting portion of the brad-set is also shown in longitudinal section. Fig. 3 is a view similar to Fig. 2 but showing the set advanced within the holder. Fig. 4 is an elevational view of the brad-set removed from the holder. Fig. 5 is a longitudinal section of the holder taken at about a quarter turn from the plane in which the section of Figs. 2 and 3 is taken. Fig. 6 is an enlarged perspective view of the brad holding

fingers and Fig. 7 is an enlarged perspective view of the detent member for maintaining the parts in their assembled relation.

The device illustrated herein is drawn to scale, that is, it is the full size of an instrument which is commercially made.

The tool comprises practically a brad-set designated in a general way by 10 and a holder or handle portion designated in a general way by 11. The brad-set is shown as embodying a shank portion 12 which has a working fit within the longitudinal chamber or bore 13 of the holder, and it has a setting plunger 14 which has a working fit within the longitudinal chamber or bore 15 of the holder. This plunger 14 and the bore or chamber 15 for receiving it are respectively of less radius than are the shank portion 12 and the chamber 13. The active end 16 of the setting plunger may in practice be concaved for the purpose of affording a firm hold upon the head of the brad. The brad-set portion also embodies a head 17, a portion of which 18 is knurled as is also the outside 19 of the holder. The back end 20 of the head is designed to receive the driving and setting impact which may be imparted by the hand or by some suitable striking implement. The front end of the head is provided with a stop shoulder 21, and the rear end of the holder is formed with an abutment face 22 for engaging and stopping said shoulder. The face 22 is located at such a suitable distance from the front end 23 of the holder that when such face 22 and the shoulder 21 are in engagement, the front end 16 of the plunger will slightly protrude beyond the front end 23 of the holder. The front end of the holder is provided upon each side with a slot 24. Adjacent to said slots there is provided a circumferential groove 25 in which a spring collar 26 is carried and said collar is provided with a pair of spring fingers 27 which extend from the outer side through the openings of the slots 24 and into the chamber or bore 15, a longitudinal recess being formed between such fingers in the path of movement of the setting plunger when the plunger is drawn back into the position illustrated in Figs. 1 and 2, a brad may be placed between the fingers 27 in the recess which they form and such brad will then be in the path of movement of the plunger when this is advanced. The brad will be placed in such recess between the fingers 27

when the implement is held in any convenient position, and to assist the positioning of the brad the plunger may be magnetized. After the brad is placed in position, the front end 23 of the holder will be placed upon the work at the position where it is desired to seat the brad and the face 20 will be given a sufficient blow to drive the brad into the work and set the same either more or less as occasion may demand. Stopping of the forward movement of the plunger by means of the shoulder 21 engaging the face 22 will not interfere with the setting of the brad because of the fact that when such shoulder and face are in engagement the front end of the plunger extends beyond the front end of the holder.

In practice it is desirable to so construct the parts that the holder and brad-set will not become disassembled and to also provide means for limiting the backward or retractive movement of the brad-set relative to the holder and for this reason a circumferential groove 28 is provided in the holder and adjacent to such circumferential groove a slot or opening 29 passes through the holder to the chamber 13. A spring collar 30 is mounted in the groove 28 and a detent 31 is carried by such collar and passes through the opening 29 and in position to engage the longitudinally disposed flattened face 32 upon the shank portion 12 of the brad-set. The flattened face 32 ends at its front portion in a stop face 33 which will be engaged by the detent 31 when the parts have been moved one relatively to the other a sufficient distance to retract the plunger for receiving a brad. The detent being yieldable will permit the disassembly of the parts when occasion may demand.

Having thus described my invention, I claim:

1. The combination with a brad-set embodying a cylindrical shank having a flattened side face for a portion of its length ending in a stop face at the front, a cylindrical brad setting plunger of lesser radius than the shank and carried at the front end thereof and having a head at the rear end thereof, said head being provided with a shoulder at its front face, of a handle having a longitudinal bore constituting a guide for the shank and having a shoulder for engaging the shoulder on the head and having an opening into said bore, and at the front end a longitudinal bore of lesser radius than the first mentioned bore for receiving the

brad setting plunger, said handle having openings at each side extending from the outer side into said bore of lesser radius, a spring mounted externally of the holder and entering said opening in the same for engaging the flattened side and the stop face on the shank, and a spring mounted externally of said holder and having fingers entering through the said openings into the said bore of lesser radius, and forming a longitudinal recess for receiving a brad and located in position for permitting the passage therethrough of the brad setting plunger.

2. The combination with a brad set embodying a shank, said shank having a head at the bottom end, a brad engaging face at the front end and a longitudinal guide face and a stop face at the front end of such guide face, of a holder having a chamber for receiving and guiding the brad set and having an opening entering said chamber and located for registration with the said guide face, there being a groove about the holder adjacent such opening, a spring collar seated in the said groove and a spring detent carried by the collar and entering said opening for engaging the guide face and stop face on the shank, said handle being provided at its front portion with a pair of slots and a groove adjacent to such slots, a spring collar mounted in such groove and a pair of fingers carried by such collar and entering the chamber of the handle through such slots.

3. The combination with a brad set having a brad engaging face at its front end and provided with a longitudinal guide face and a stop face at the front end of said guide face, of a holder surrounding the shank of the brad set and having an opening located to register with the said guide face and a groove adjacent said opening and a pair of slots at the front end located to register with the path of movement of the brad engaging face and a groove adjacent said slots, a detent member entering said opening and a collar carrying said detent and seated in said adjacent groove, a pair of spring brad holding fingers entering said slots and a collar carrying said fingers and seated in the said adjacent groove.

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