O. N. THUNE.

NAIL HOLDING AND FLOOR SETTING DEVICE.

APPLICATION FILED AUG. 8, 1916.

1,238,599.

Patented Aug. 28, 1917.

2 SHEETS—SHEET 1.

Fig. 1.

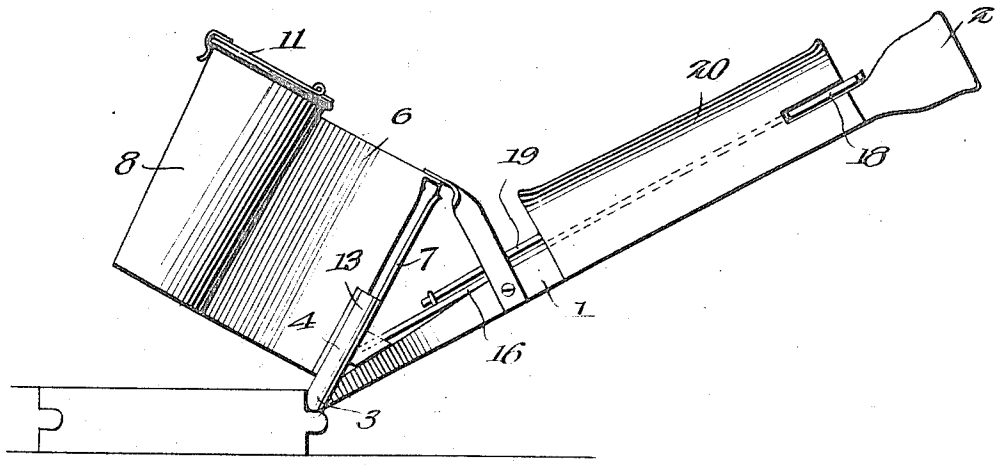
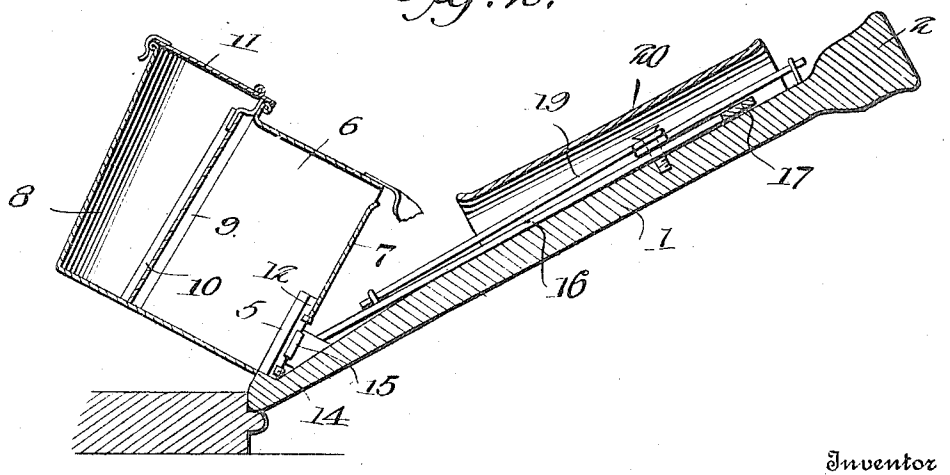


Fig. 2.



Witnesses

Hugh H. Lee

John J. McCarthy

Inventor

O. N. Thune,

By Victor J. Evans

Attorney

O. N. THUNE.

NAIL HOLDING AND FLOOR SETTING DEVICE.

APPLICATION FILED AUG. 8, 1916.

1,238,599.

Patented Aug. 28, 1917.

2 SHEETS—SHEET 2.

Fig. 3.

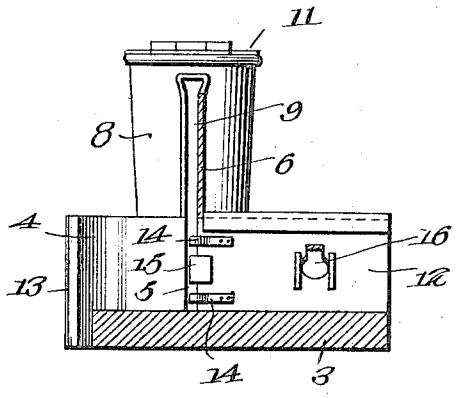


Fig. 4.

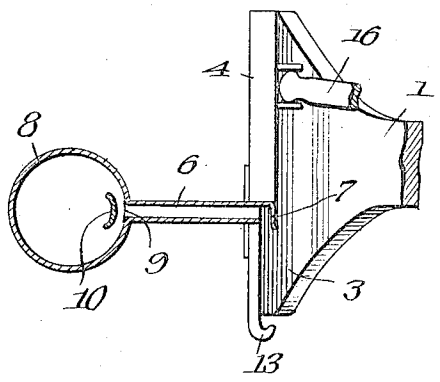
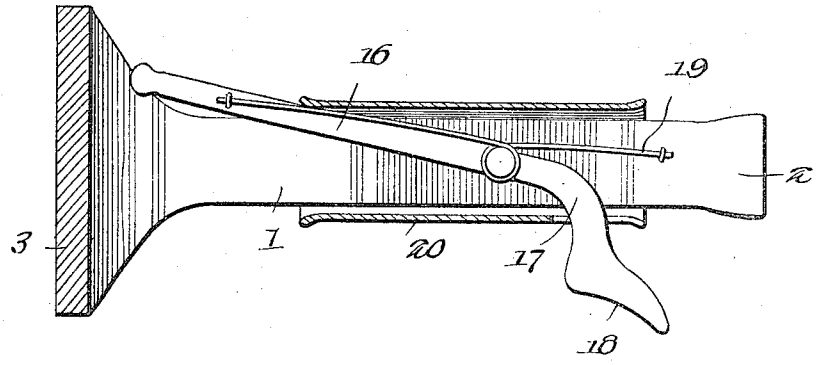


Fig. 5.



Inventor

O. N. Thune,

Witnesses

Hugh H. Ott

John J. McCarthy

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

OLE N. THUNE, OF CLIMAX, MINNESOTA.

NAIL-HOLDING AND FLOOR-SETTING DEVICE.

1,238,599. Specification of Letters Patent. Patented Aug. 28, 1917.

Application filed August 8, 1916. Serial No. 113,784.

To all whom it may concern:

Be it known that I, OLE N. THUNE, a citizen of the United States, residing at Climax, in the county of Polk and State of Minnesota, have invented new and useful Improvements in Nail-Holding and Floor-Setting Devices, of which the following is a specification.

This invention relates to improvements in nail holding and floor setting devices whereby nails may be held in position to be driven into the tongue and groove planks of the flooring and the planks forced into snug engagement with one another.

In carrying out the present invention, it is my purpose to provide a device of the class described whereby nails may be held in position to be struck by a hammer and driven into the planks of the flooring, and the planks of the flooring driven up against one another tightly, and wherein the nails may be automatically fed into driving position successively, thereby enabling the flooring to be laid quickly and conveniently.

It is also my purpose to provide a device of the type set forth which will embrace the desired features of simplicity, efficiency and durability, which will embody comparatively few parts and these so arranged and correlated as to reduce the possibility of derangement to a minimum and which may be handled with ease and convenience.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter set forth in and falling within the scope of the claims.

In the accompanying drawings:

Figure 1 is a view in side elevation of a device constructed in accordance with the present invention, the same being shown in use.

Fig. 2 is a longitudinal sectional view therethrough.

Fig. 3 is a transverse sectional view through the same.

Fig. 4 is a horizontal sectional view through the device.

Fig. 5 is a similar view through the handle of the device.

Referring now to the drawings in detail, 1 designates a shank of suitable length formed to provide a handle member and having one end formed with an impact head 2 and the other end widened as at 3 to form a heel. Secured to the upper side of the heel adjacent to the outer edge thereof is an abutment plate 4 arranged at an acute angle to the heel. Formed in the abutment plate 4 and opening onto the rear edge thereof is a cross slot 5 arranged at the center of the abutment plate and mounted upon the plate in line with the slot 5 is a feed chute 6 having the lower end open and one side of said chute projecting beyond the plate 4. One side of the chute 6 beyond the plate 4 is relatively long and is formed with a horizontal flange 7 disposed in a plane below and parallel with the plate. Mounted on the upper end of the chute 6 is a nail magazine 8 which, in the present instance, is circular in cross section and is formed with a longitudinal slot 9 that is in open communication with the chute. Suitably secured to the inner wall of the magazine above the slot 9 is a baffle plate 10 whereby the nails in the magazine may enter the chute singly and without congesting in the slot 9. One end of the magazine 8 is provided with a hinged cover 11 whereby the nails may be inserted in the magazine. Slidably mounted on the under side of the abutment plate 4 is a follower plate 12 of a length equal to the distance between the slot 9 and one end of the abutment plate, while formed on the other end of the abutment plate and depending therefrom is a flange 13 that is spaced apart from the adjacent end of the heel formed by the widened portion 3 of the shank and the distance between the heel and the flange is such that a nail may pass freely therethrough. Secured to the lower side of the follower plate 12 and projecting beyond the slot end thereof are spring fingers 14 spaced apart in parallelism and arranged between the fingers 14 is a lug 15 that projects beyond said end of the follower plate, and the projecting ends of the fingers and lug lie normally below the slot 5 and coöperate with the flange 7 to support the bottommost nail in the chute so that when the follower plate is actuated or moved toward the flange 13 the nail will be held in position by the spring fingers and carried to a position in line with the space between the heel and flange 13, thereby enabling the head of the nail to be struck with a hammer and driven through the flooring.

In the present instance, a lever 16 is pivoted between its ends upon the shank 1 and one end of the lever is pivotally connected

to the follower plate 12, while the other end is formed with an outwardly projecting arm 17 arranged adjacent to the head end of the shank and formed with a finger piece 18 whereby the lever may be swung to slide the inlet plate to carry the nail into driving position. A suitable form of spring 19 is connected to the lever 16 and acts to restore the lever and the follower plate to normal position succeeding the release of the finger piece. Secured to the shank and surrounding the major portion of the lever 16 and the spring 19 is a guard 20 whereby the hand that grasps the shank to hold the device in active position is prevented from contacting with the lever and spring.

In practice, the device is used as illustrated in Fig. 1, and each time that it is desired to drive a nail through the flooring the lever 16 is swung to slide the follower plate 12 to bring a nail into driving position. The nail is then driven until the head thereof is in juxtaposition to the upper or rear edge of the abutment plate. The device is removed at this time and the remaining portion of the nail driven through the flooring in the usual manner. After the nail has been driven into the flooring by the hammer, the heel of the device is placed in engagement with the head of the nail and the impact head 2 struck with the hammer so that the head of the nail will be securely embedded in the flooring. When the device is thus struck the tongue and groove planks of the flooring are driven tightly against one another.

While I have herein shown and described the preferred form of my invention by way of illustration, I wish it to be understood that I do not limit or confine myself to the precise details of construction herein described and delineated, as modification and variation may be made within the scope of the claims and without departing from the spirit of the invention.

I claim:

1. A device of the class described comprising a shank having one end formed to provide a heel, an abutment plate secured to said heel at the outer edge thereof and overlying the heel and having one end edge formed with a depending flange spaced apart from the heel to provide a space through which a nail may be driven, and a follower plate slidably mounted upon the under side of said abutment plate and movable to carry the nail into driving position.

2. A device of the class described comprising a shank having one end formed to provide a heel, an abutment plate secured to said heel at the outer edge thereof and overlying the heel and having one end edge formed with a depending flange spaced apart from the heel to provide a space through which a nail may be driven, a follower plate slidably mounted upon the under side of said abutment plate and movable to carry the nail into driving position, said abutment plate being formed with a slot adjacent to one edge of said follower plate, and a nail magazine in communication with said slot.

3. A device of the class described comprising a shank having one end formed to provide a heel, an abutment plate secured to said heel at the outer edge thereof and overlying the heel and having one end edge formed with a depending flange spaced apart from the heel to provide a space through which a nail may be driven, a follower plate slidably mounted upon the under side of said abutment plate and movable to carry the nail into driving position, said abutment plate being formed with a slot adjacent to one edge of said follower plate, a nail magazine in communication with said slot, and means on said follower plate for holding the nail in proper position in the follower plate to carry the nail to driving position.

4. A device of the class described comprising a shank having one end formed to provide a heel, an abutment plate secured to said heel at the outer edge thereof and overlying the heel and having one end edge formed with a depending flange spaced apart from the heel to provide a space through which a nail may be driven, a follower plate slidably mounted upon the under side of said abutment plate and movable to carry the nails successively into driving position, said abutment plate being formed with a slot adjacent to one edge of said follower plate, a nail magazine in communication with said slot, means on said follower plate for holding the nail in proper position in the follower plate to carry the nail to driving position, and means on said shank for actuating said follower plate to driving position.

5. A device of the class described comprising a shank having one end formed to provide a heel, an abutment plate secured to said heel at the outer edge thereof and overlying the heel and having one end edge formed with a depending flange spaced apart from the heel to provide a space through which a nail may be driven, a follower plate slidably mounted upon the under side of said abutment plate and movable to carry the nails successively into driving position, said abutment plate being formed with a slot adjacent to one edge of said follower plate, a nail magazine in communication with said slot, means on said follower plate for holding the nail in proper position in the follower plate to carry the nail to driving position, means on said shank for actuating said follower plate to driving position, and means for restoring the plate upon the release of the last-named means.

6. A device of the class described comprising a shank having one end formed to provide a heel, an abutment plate secured to said heel at the outer edge thereof and overlying the heel and having one end edge formed with a depending flange spaced apart from the heel to provide a space through which a nail may be driven, a follower plate slidably mounted upon the under side of said abutment plate and movable to carry the nails successively into driving position, said abutment plate being formed with a slot adjacent to one edge of said follower plate, a nail magazine in communication with said slot, means on said follower plate for holding the nail in proper position in the follower plate to carry the nail to driving position, means on said shank for actuating said follower plate to driving position, means for restoring the plate upon the release of the last-named means, and an impact head on the other end of said shank.

In testimony whereof I affix my signature.

OLE N. THUNE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."