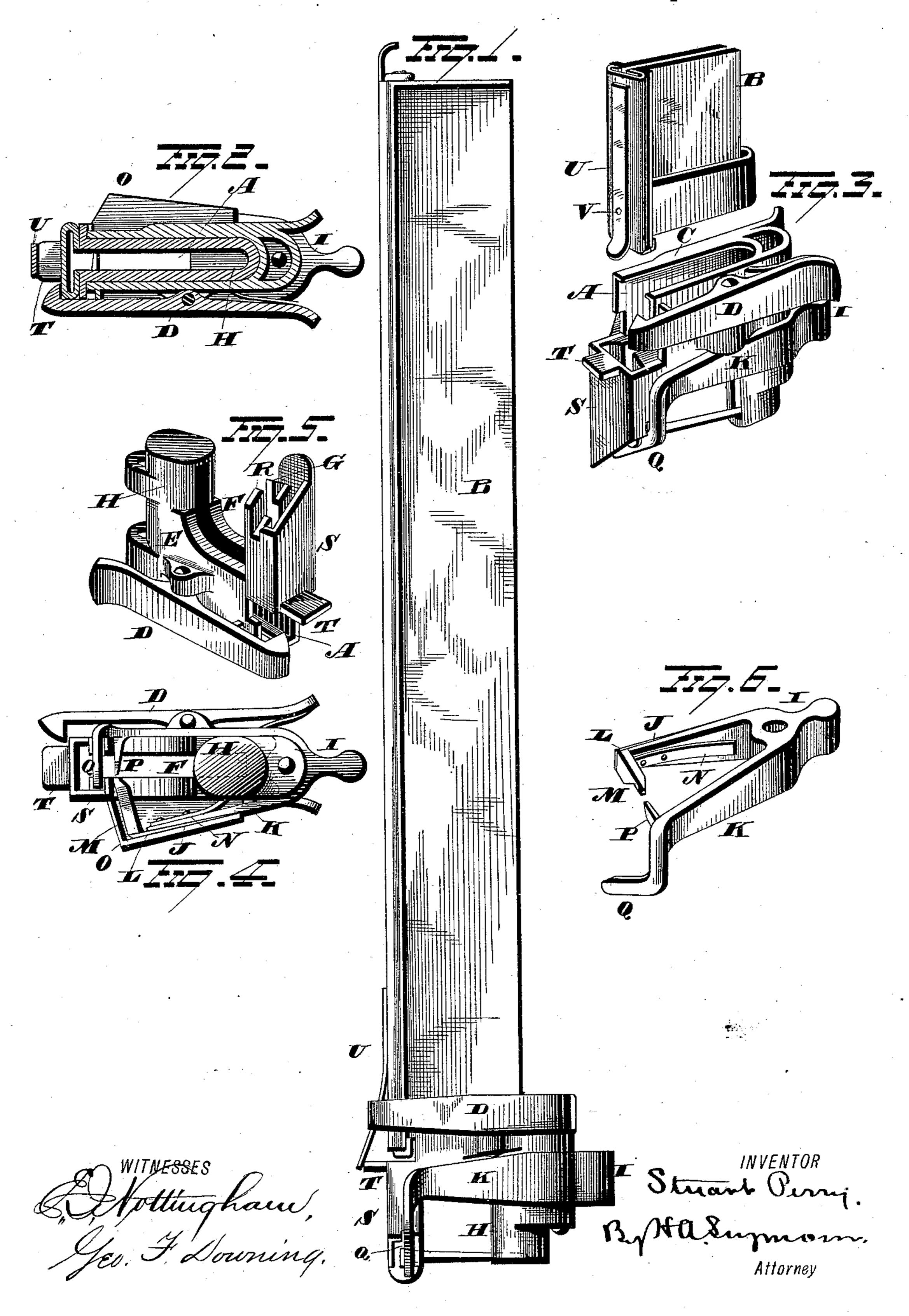
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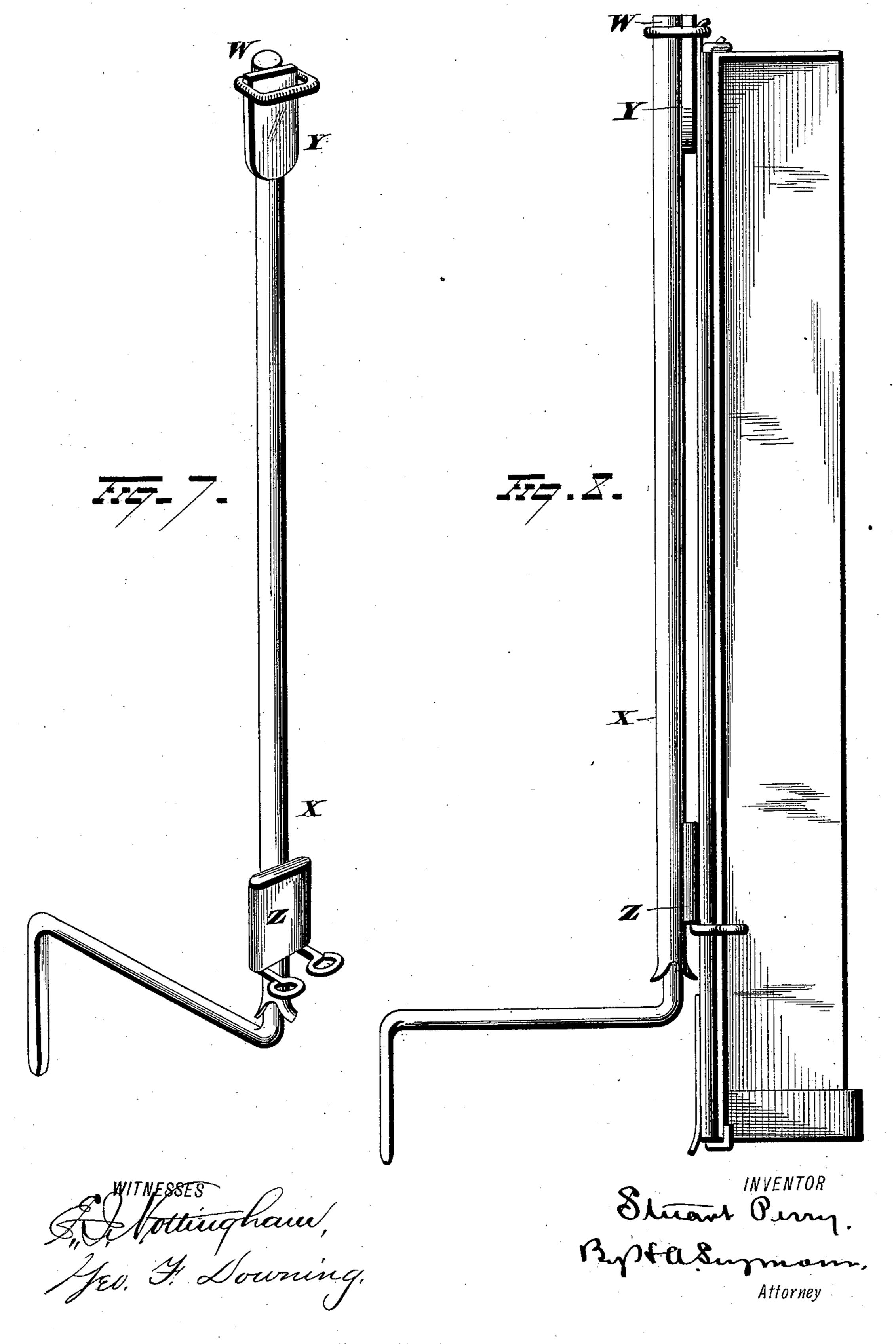


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United States Patent Office.

STUART PERRY, OF NEWPORT, NEW YORK.

IMPLEMENT'FOR FEEDING NAILS.

SPECIFICATION forming part of Letters Patent No. 285,667, dated September 25, 1883. Application filed January 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, STUART PERRY, of Newport, in the county of Herkimer and State of New York, have invented certain new and 5 useful Improvements in Devices for Facilitating Lathing; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make 10 and use the same.

My invention relates to an improvement in devices for facilitating operations of nail-driving, and particularly that of lathing, the object being to provide a device for successively 15 separating and delivering to the fingers the foremost of a series of nails arranged in serial order in a nail-magazine.

A further object of the invention is to provide an auxiliary device arranged to support 20 a nail-magazine and the nail-separating device aforesaid, and adapted to be adjusted to give right direction for driving to the nails as they

are delivered to the fingers.

With these objects in view my invention 25 consists in a nail-separating and an auxiliary device having certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is 30 a view in side elevation of a nail-separating device embodying my invention, the same being attached to a magazine for holding nails arranged in serial order. Fig. 2 is a view of the device in horizontal section taken 35 through the catch by which it is attached to the nail-magazine. Fig. 3 is a view in perspective of the device, showing also the lower end of a nail-magazine. Fig. 4 is a view of the device in end elevation. Fig. 5 is a view 40 thereof in perspective, the separator being removed. Fig. 6 is a detached view of the separator. Fig. 7 is a view in perspective of the auxiliary device for supporting a nail- | spur M. The spur P aforesaid is retracted magazine and the separating device; and Fig. 45 8 is a view of the auxiliary device in side elevation, showing the manner of attaching a nail-magazine to it.

The upper end of the separating device is provided with an open chamber, A, adapted 5c to receive, interchangeably, the lower ends of the nail-magazines B, which are retained in | and extending diagonally across the outer end

place in the said chamber by the flanged outer wall, C, thereof and the spring-actuated catch D, the same being pivoted to one of the side walls of the chamber and arranged to engage 55 with the flanged upper edge of the magazines. A plate, E, constituting, as it were, the frame or body of the separating device is traversed by a slot, F, which receives the nails and which virtually forms an extension of the 60 nail-passage of the magazines. The lower end of this plate is cut away, as shown, to expose the central portions of the shanks of the nails, the heads of which are supported by the open extension G, while their points are inclosed 65 by the closed extension H. By cutting the plate E away in this manner, and thereby exposing the shanks of the nails, they are readily grasped by the thumb and forefinger and re-

moved for driving. The separator I, which is pivoted to the rear end of the plate E, is provided with arms J and K, which extend forward to the extension G, on opposite sides of the extension H. A. spring, L, attached to the outer face of the 75 arm J, supports a pointed and beveled spur, M, the function of which is to successively separate the foremost nail from the line, the spur being retained in its normal position of constant readiness to advance and separate 80

the foremost nail by another spring, N, attached to the inner face of the arm J and bearing upon the contiguous wall of the extension H. The object in mounting the spur M upon the spring L is to permit the spur to yield in 85 case it engages with a nail instead of passing between two nails, or in case a defective nail is encountered. A shield, O, attached to the

plate E, is designed to protect the arm J and its attachments from injury.

The arm K of the separator is provided with a spur, P, nominally extending across the slot in the extension G, and located in front of the from its normal position, in which it prevents 95 the line of nails from gravitating forward simultaneously with the advance of the spur M, to separate the foremost nail of the line, which is thus allowed to descend until it is arrested by the engagement of its head with the 100 arm Q, forming an extension of the arm K,

of the extension G, which is cut away, as shown at R, to permit the said arm Q to set in flush with the upper face of the extension, thus offering unobstructed progress to the 5 heads of the nails.

It should be here remarked that as the separated nails fall past the spur P and are arrested by the engagement of their heads with the arm Q their points are arrested by engagement with the lower wall of the extension K. Aside from its function of arresting the nails as they are separated from the line, the arm Q performs the important office of effecting the separation of the nails by actuating the separator itself, the said arm being pushed aside as the nails are successively removed for driving, with the effect of rocking the separator on its fulcrum.

A shield, S, secured to the extension G, is designed to protect the same and the heads of the nails located in its slot. It is provided with an outwardly-extending arm, T, arranged to engage with and elevate the springs U of the magazines, the said springs being respectively provided with pins V, which engage with the foremost of the lines of nails in the magazines and prevent the same from discharging. When the separating device is attached to a magazine, it is of course necessary to withdraw the pins from engagement with the nails to permit them to descend into the slot F of the plate E of the device.

Having fully described the construction of the separating device, I will now proceed to 35 set forth the method of its operation. At the outset the act of attaching it to a nail-magazine will engage the arm T of the shield S with the spring U and release the line of nails, allowing them to descend and enter the slot F 40 of the plate E, the line being arrested by the spur P of the separator, which is now operated by hand to separate the foremost nail of the line and permit it to descend and engage with the arm Q. This nail is now grasped by 45 the thumb and forefinger and removed from the device and driven. The act of removing this nail pushes the arm Q aside and rocks the separator on its fulcrum in such manner as to enter the spur M between the nail now 50 foremost in the line and the nail immediately in the rear thereof. The nail thus separated falls past the spur P, being arrested by the arm Q, which is restored to its normal position across the slot in time to arrest and re-55 tain the nail. When this nail is removed, the

tion of another nail. It will thus be seen that, although the separating device must be oper-to ated directly by hand in the separation of the first nail, the operation of removing that nail will separate another, and so on until the charge of the magazine is exhausted.

arm Q will again be pushed aside, with the ef-

fect of actuating the separator in the separa-

The separating device, which has been de-65 scribed as being removably attached to a magazine, is designed to be used interchangeably

with a number of magazines carried (may be) in a harness attached to the body. The adaptation of the device to be attached to the magazines may of course be greatly varied, both according to its construction and to the construction of the magazines. Instead, however, of interchanging a single separating device with a number of magazines, each magazine may have a separating device attached permanently to it.

All operations of nail-driving are facilitated by delivering the nails to the fingers in the most convenient position for driving, which varies with the character of the work, the nail be-80 ing grasped differently. For instance, in lathing ceilings and side walls, I have made provision for delivering the nails to the fingers in right direction for driving in an auxiliary supporting device from which the nail-magazines 85 are suspended, the said support consisting of a bent rod, W, adapted to be attached to the operator in any desired manner, the upright portion of the said rod being provided with a sleeve, X, which may be rotated as desired. 90 The upper and lower ends of this sleeve are respectively provided with flat bearings Y and Z, furnished with suitable attachments for engaging with the upper and lower ends of the magazines, which are rotated with the sleeve 95 and brought into the desired position for properly delivering the nails to the fingers.

Other devices may be adopted for supporting the magazines. They may, for instance, be suspended from a harness attached to the body, 100 and such harness may or may not be provided with an auxiliary supporting device similar to the one described.

In view of the modifications suggested, and of others of which the devices are obviously 105 susceptible, I would have it understood that I do not limit myself to the exact construction shown and described, but that I hold myself at liberty to make such slight changes and alteration as fairly fall within the spirit and 110 scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a portable magazine adapted to hold nails arranged in serial order, of means, substantially as described, to successively separate the foremost nail from the line and to retain the remaining nails in place, and means, substantially as described, 120 to receive the separated nails and engage with their heads, the shanks of the said separated nails being exposed to enable the nails to be grasped thereby and removed for driving, substantially as set forth.

2. The combination, with a nail-magazine adapted to hold nails arranged in serial order, of the separator I, provided with the arm Q, and means, substantially as described, to receive the separated nails and to engage with 130 their heads, the shanks of the separated nails being exposed to enable the nails to be grasped

5 thereby and removed for driving, substantially as set forth.

3. The combination, with a portable magazine adapted to hold nails arranged in serial order, of means, substantially as described, to successively separate the foremost nail of the line, to receive the separated nails, and to retain them in position to be grasped by their shanks and removed for driving, and means, substantially as described, for supporting the

magazines, and for turning them from side to 15 side to give right direction for driving to the separated nails, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

STUART PERRY.

Witnesses:

GEORGE F. DOWNING, GEO. D. SEYMOUR.