

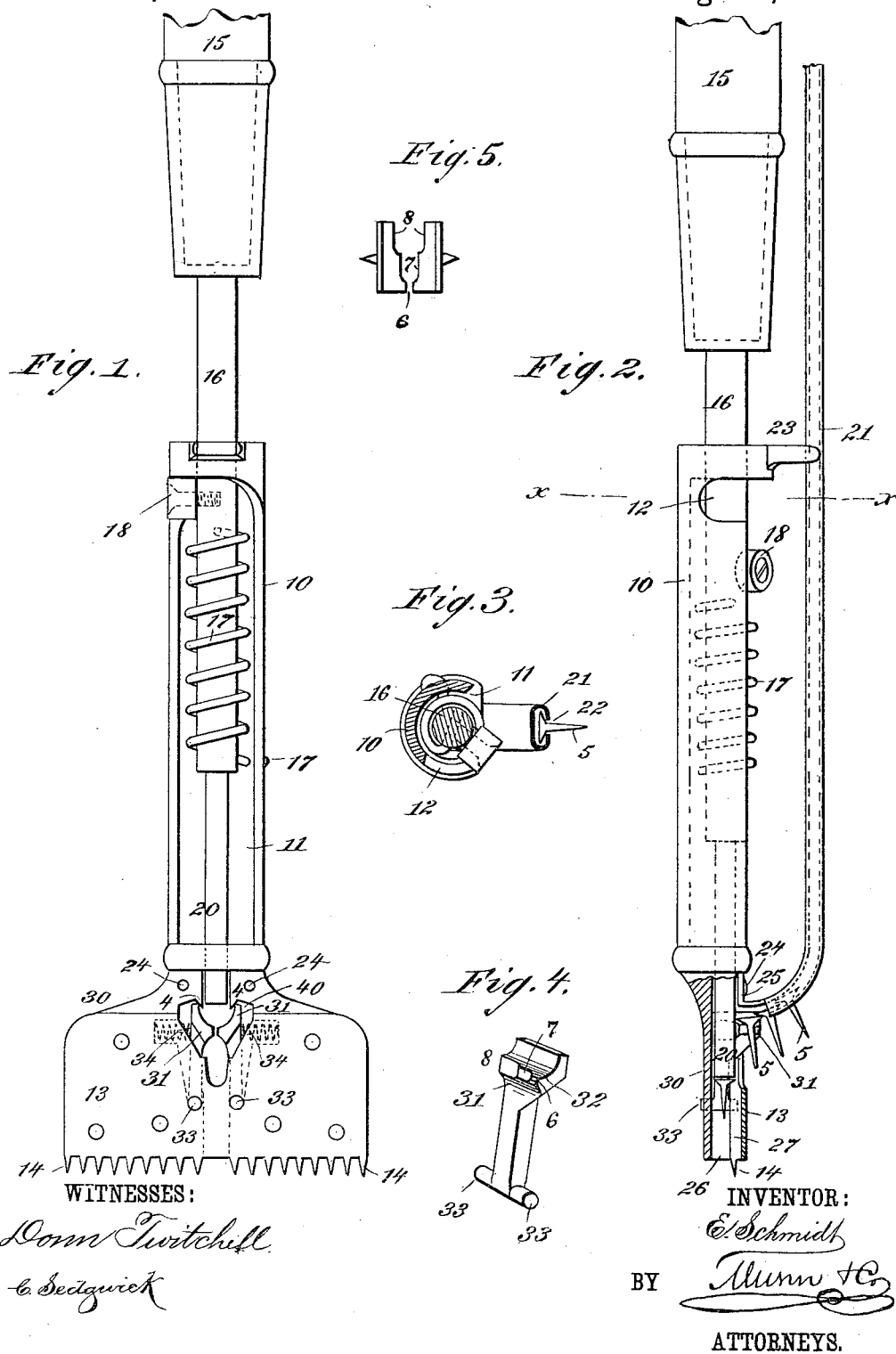
(No Model.)

E. SCHMIDT.

COMBINED CARPET STRETCHER AND TACKER.

No. 348,350.

Patented Aug. 31, 1886.



UNITED STATES PATENT OFFICE.

EUGENE SCHMIDT, OF STILLWATER, MINNESOTA.

COMBINED CARPET STRETCHER AND TACKER.

SPECIFICATION forming part of Letters Patent No. 348,350, dated August 31, 1886.

Application filed June 7, 1886. Serial No. 204,392. (No model)

To all whom it may concern:

Be it known that I, EUGENE SCHMIDT, of Stillwater, in the county of Washington and State of Minnesota, have invented a new and Improved Combined Carpet Stretcher and Tacker, of which the following is a full, clear, and exact description.

My invention relates to the construction of an implement whereby carpets may be stretched to place, and whereby, having been stretched to place, they may be tacked to the floor of an apartment; and the invention consists of certain novel constructions and combinations to be hereinafter described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the figures.

Figure 1 is a view of the lower side of the implement forming the subject-matter of this application, the handle, however, not being shown, and the tack-carrying tube being removed in order to better disclose the tack-delivering mechanism. Fig. 2 is a side view of the implement, the lower portion thereof being shown in section. Fig. 3 is a sectional plan view taken on line *x x* of Fig. 2. Fig. 4 is a perspective view illustrating in detail the construction of one of the folding jaws between which the tacks pass. Fig. 5 is a detail plan view of the jaws through which the tacks pass.

In constructing such an implement as the one illustrated in the drawings above referred to, I provide a main supporting frame or casting, 10, which is cylindrical in cross-section, but formed with a longitudinal slot or opening, 11, and with an upper cross-slot, 12, leading from the main longitudinal slot 11. The lower portion of the casting 10 is in the form of a flat plate—such as the one shown at 30—and to the under side of this plate there is secured a steel plate, 13, formed with teeth 14, 14, which serve in the ordinary manner to secure a hold upon the carpet to be stretched.

The handle of the implement is broken away in the drawings, the shank 15 of said handle being, however, shown, and in this shank there is fitted a rod, 16, which enters the bore of the casting 10, and is normally upheld by a spring, 17, one end of this spring being secured

to the rod 16, while the other is secured to the casting 10. The rod 16 carries a roller, 18, and the spring 17 is so arranged that when the handle of the implement is released it will force this roller into the transverse slot 12—that is, to the position indicated in Fig. 1. To the lower end of the rod 16 there is secured a rod, 20, which constitutes the plunger or hammer, by which the tacks are forced through the carpet and into the floor, as will be presently explained.

To the under side of the implement there is secured a tube, 21, formed with a longitudinal slot, 22, said tube being supported by a bracket, 23, and by rivets 24, which pass through a flange, 25, formed on the tube, and enter the plate 30 of the casting 10 in the positions best shown in Fig. 1, the tube being curved inward at its lower end, and its slot 22 being upon the outer and under side of the tube.

Although the plate 30 has been described as a flat plate, still it has a central recess, 26, which is in register with a similar recess, 27, in plate 13, forming an opening in line with the plunger 20, and in the enlarged upper portion of this opening there are mounted swinging jaws 31, the upper approaching faces of which are inclined, as shown at 32. The approaching edges of the jaws 31 are formed with shoulders 6, 7, and 8, as shown in Fig. 5, and each of the jaws is provided with trunnions 33, by means of which they are mounted between the plate 30 of the casting 10 and the plate 13. These jaws 31 are normally held in the position in which they are shown in Fig. 1 by springs 34. In the plate 13 there is an opening, 40, through which the upper portions of the jaws 31 project, and upon the upper portions of the plate there are stops 4, against which the upper ends of the jaws 31 abut.

In operation the heads of a number of tacks, 5, are placed within the tube 21, the points of the tacks projecting out through the slot 22. Now, the weight of the tacks will force the lowest tack forward between the jaws 31 and into the path of the hammer or plunger 20, between the shoulders 8, so that by turning the handle of the implement to release the roller 18 from engagement with the slot 12 and then forcing down the handle the ham-

mer or plunger will strike against the head of the tack, and any continued pressure will force open the jaws 31, so that the tack may be delivered to the position shown in Fig. 2 and thence to the floor, being driven or forced into position. By relaxing the force employed to throw down the handle the spring 17 will act to return the handle to the position shown in Fig. 1, and from its peculiar connection with the rod 16 and the casting 10 it will act to throw the roller 18 into engagement with the slot 12, and it is when the parts are in this position that the implement is used as a carpet-stretcher.

15 The spring 17 is double acting, as it performs the function of a torsion-spring as well as that of a retractile spring.

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

20 1. The combination, with the frame or casting 10, formed with a longitudinal and a transverse slot, and the carpet and tack holding devices at the lower end of the casting, of an operating-rod extending through the longitudinal bore of the casting, the roller 18 on the rod, and adapted to engage the transverse slot in the casting, and the double-acting spring 17, connected to the operating-rod and to the casting, the said spring acting to retract the operating-rod from the tack-holding devices and to throw the roller into the transverse slot, substantially as set forth.

2. The combination, with the casting 10 30, bored longitudinally, of the operating rod or

plunger, the plate 13 under the plate 30, the plates 30 and 13 being recessed to form an aperture in alignment with the bore of the casting, the jaws 31, pivoted at their lower ends between said plates and having 40 their upper ends inclined at 32 to connect with the rod or plunger, and their inner approaching edges below the incline shouldered, as at 6, 7, and 8, to form tack-receiving spaces, and the feeder leading to the said shouldered 45 ends of the said jaws, substantially as set forth.

3. The combination, with the casting 10, longitudinally bored, and having the plates 30 13 at its lower end, recessed in alignment with said bore, the plate 13, having the opening 40 50 at its upper end, the operating rod or plunger, and the feeding-tube curved inward at its lower end, adjacent to the opening 40, of the laterally-swinging jaws 31, pivoted at their lower ends between plates 30 13, on opposite sides 55 of and parallel with the aperture or recess formed between said plates, the upper ends of the jaws projecting through the opening 40, adjacent to the feeding-tube, and being inclined on top, as at 32, and formed with shoulders 6 60 7 8 below said inclined top portion, the shoulders 6 being adjacent to the delivery end of the tube, and the shoulders 8 being at opposite sides of the longitudinal opening or bore traversed by the rod or plunger, substantially as 65 set forth.

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Witnesses:

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