

UNITED STATES PATENT OFFICE.

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THRESHOLD-GAGE.

SPECIFICATION forming part of Letters Patent No. 441,522, dated November 25, 1890.

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To all whom it may concern:

Be it known that I, ALEXANDER WATSON, of Brookline, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Threshold-Gages, of which the following is a full, clear, and exact description.

My invention relates to threshold-gages, and has for its object to provide a simple and durable tool whereby threshold-strips may be expeditiously and accurately fitted to door-frames, even by persons of but little experience; and the invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and 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 views.

Figure 1 is a perspective view of the gage, illustrating the application thereof. Fig. 2 is a transverse section through one end, taken on line 2 2 of Fig. 1, and Fig. 3 is a perspective view of a substitute plate.

The body A of the gage is made in two sections 10 and 11. The main section 10 is preferably rectangular in cross-section and is provided upon its upper face at the ends with attached blocks 12 and 13; or the said ends may be rendered thicker than the other portion of the section in any suitable or approved manner. A horizontal slot or opening is made in the enlargement 13, and a set-screw 14 is used in connection with the said enlargement, which set-screw is capable of extending downward within the said opening, the lower wall of the opening being preferably in a plane with the upper face of the section between its ends, as is best shown in Fig. 1. In the opposite enlarged end 12 a transverse and a longitudinal slot 15 and 16 are produced, which slots extend through from face to face, and at one side of the enlarged end 12 in the under face a recess 17 is formed. The outer end 18 of the section 11 of the body is identical in construction with the end 12 of the main section 10; but the remaining portion 19 of the section 11 is narrower than the end portion of end 18, and the said narrow portion is made to pass through an opening in the enlargement 13 of the sec-

tion 10, and is also adapted to slide upon the said section, being guided in its movement by a clamp-plate 20, the ends of which plate are bent downward to engage with the side surfaces of the body-section 10, as best shown in Fig. 1. At the outer end of both sections three gage-plates 21, 22, and 23 are employed, the location of which plates at each end is usually identical, and therefore the description of the plates at one end will suffice for those at the opposite end. The plate 21 is provided with a downward bend 24 at its outer end, which bend corresponds to the bevel of the threshold-strip to be gaged. At or near the inner end of this plate a threaded stud 24^a is secured, which stud is made to pass upward through and project above the transverse slot 15 in the end 12 of the main section, and the downwardly-bent end of the plate 21 extends outward at a right angle to one side of the section 10, the outer side of the plate extending slightly beyond the outer end of the body, as is best illustrated in Fig. 1. By reason of the elongated slot 15 the plate 21 may be adjusted inward or outward as far as desired, and it is held in the proper position by a thumb-nut 25. The plate 22 is also provided with a threaded stud 26 near its inner end, which stud extends upward through and beyond the slot 16, and is provided likewise with a thumb-nut 27. The plate 22 is of sufficient length to extend some distance beyond the opposite longitudinal side edge of the body, and of sufficient width to project beyond the end of the same. The plate 22 is further provided with a second threaded stud 28. The third plate 23 has an upturned flange 29 formed at one side, and this latter plate is located transversely upon the plate 22, the flanged side thereof being made to face the outer end of the plate upon which it slides. The flanged plate 23 has a transverse slot or opening 30 formed therein, extending through from face to face, and through this slot or opening the threaded stud 28 of the plate 22 extends upward. When the flanged plate is adjusted inward, or in the direction of the body of the gage, it enters the recess 17 in said body, which is placed there to permit of such movement, and the plate is secured in position by being forced into frictional contact with the lower plate 22 by means of a button 31, held

to turn upon the threaded stud 28, which stud is likewise provided with a thumb-nut 32.

In connection with each of the thumb-nuts mentioned a washer may be used, if found desirable. It will be observed that the plates 21, 22, and 23 are alike at each end of the gage, and that the sections of the gage-body may be manipulated to accommodate any width of door-frame. The plate 33 (illustrated in Fig. 3) is adapted to be substituted for the plate 21 when a beveled or bent plate is not necessary.

The operation of gaging is as follows: The operator should take his position upon the rabbeted side of the door-frame and place the gage, with the set-screw 14, at the right-hand side of where the threshold is to be fitted. All the thumb-screws are slightly loosened and the plates 21 are made to contact with the frame, as illustrated in Fig. 1, and when brought in such contact the thumb-screw governing said plate is screwed down to place. The plates 22 are next fitted into the rabbeted portion of the frame, and when so fitted the thumb-screws controlling them are screwed to place. Finally, the plates 23 are made to fit closely against the plinth-blocks and edges of the frame, as is also shown in Fig. 1, and these plates are secured in position. It will be understood that previous to the operation above described the body is lengthened to correspond with the width of the door-frame gaged. If, however, in practice it is found more desirable, the plates at one end may first be fitted to the frame and the body-section then lengthened and fixed in position, whereupon the plates at the opposite end of the gage may be manipulated. When the gage has been properly set, it is removed from the frame and

placed upon the threshold-strip to be fitted, the back edge of the plate 23 being preferably placed on a line with the top edge of the front bevel of the strip. All that is further necessary is to scribe or mark the threshold-strip in accordance with the position of the outer ends of the plates 21, 22, and 23.

It will be observed that with a gage of the character described a threshold-strip may be fitted not only expeditiously but accurately as well.

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

1. In a threshold-gage, the combination, with an extensible body, of rectangular plates adjustably attached to the ends of the body, second plates having one beveled end also attached to the ends of the body, the opposed plates being adapted to extend laterally in opposite directions, and third plates adjustably attached to the first-named plates, as and for the purpose specified.

2. In a threshold-gage, the combination, with an extensible body constructed in two sliding sections and provided with a set or binding screw and a recess at each end in one side of the under face, of a plate having one beveled end adjustably-secured at each end of the body, a rectangular plate also adjustably secured at each end of the body, the rectangular and beveled plates extending in opposite directions, and a flanged plate adjustably secured to the rectangular plate, as and for the purpose specified.

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Witnesses:

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