No. 675,844. Patented June 4, 1901.

G. H. SMITH.

HAT BRIM NOTCHER.

(Application filed Oct. 27, 1900.)

(No Model.)

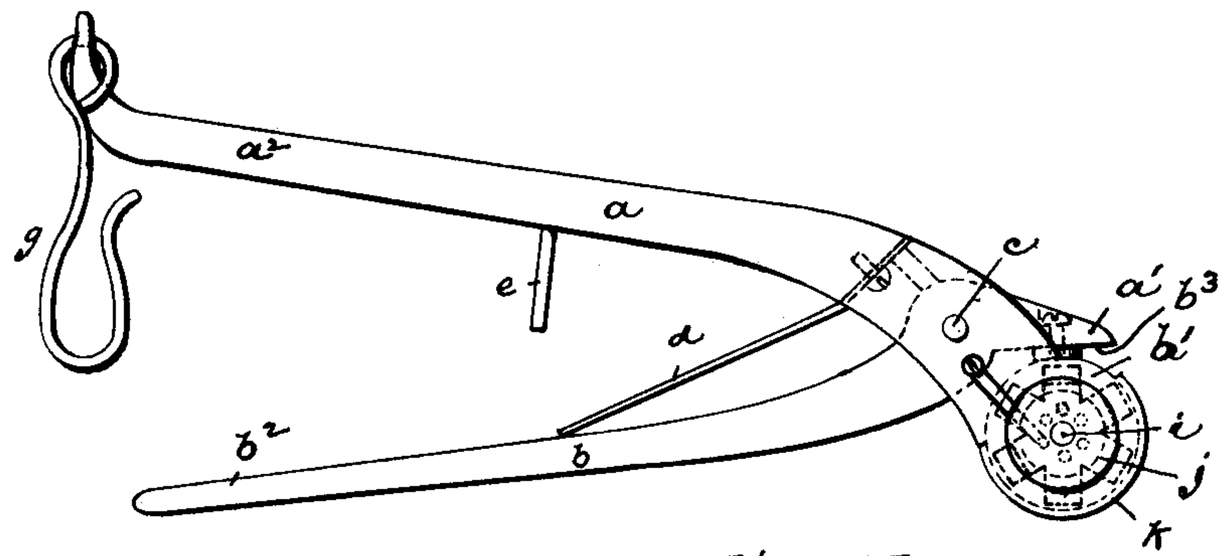

Fig. 1.

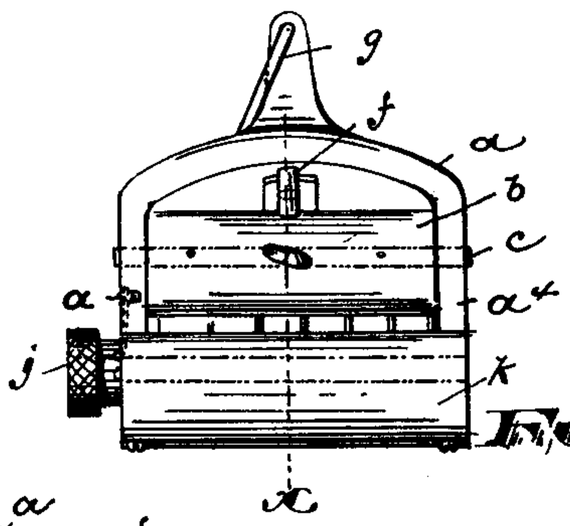

Fig. 2.

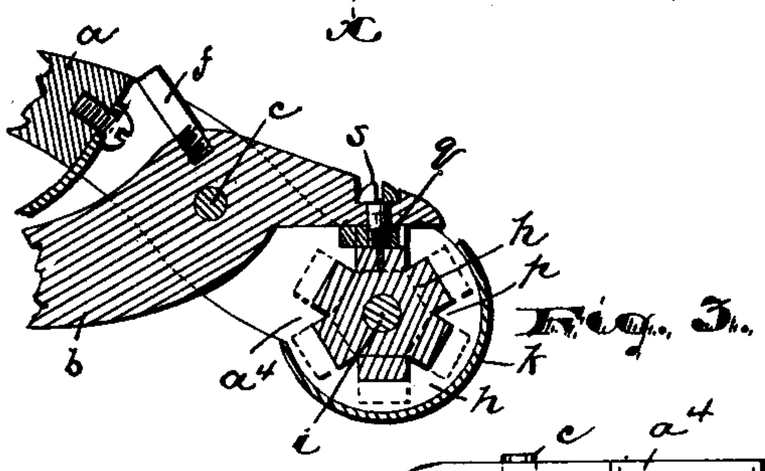

Fig. 3.

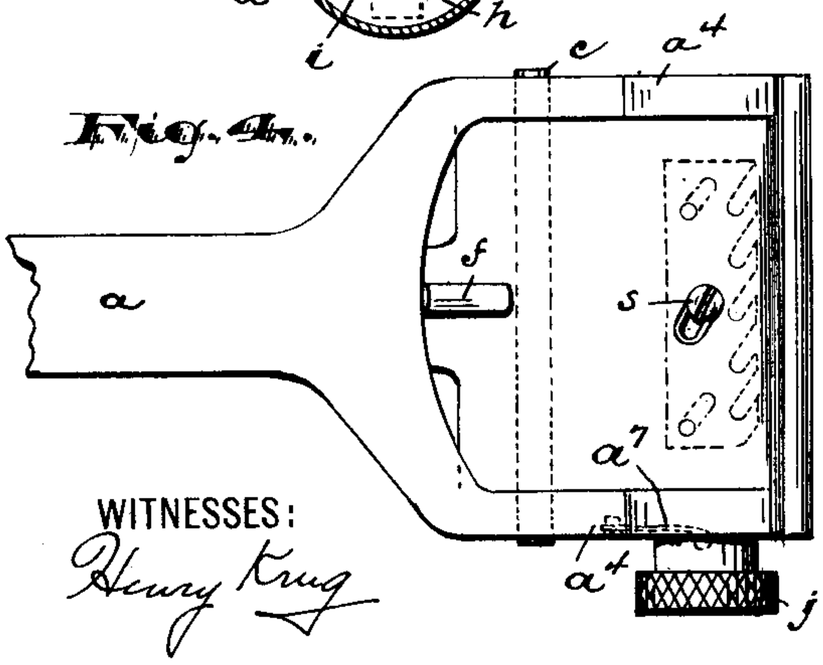

Fig. 4.

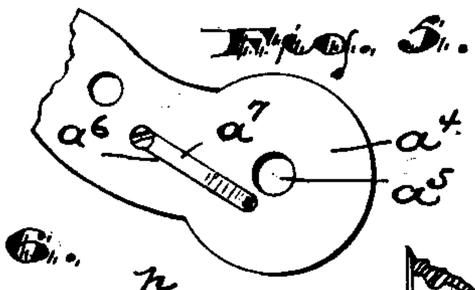

Fig. 5.

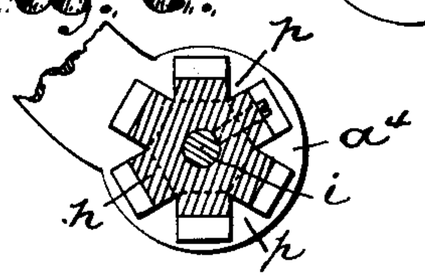

Fig. 6.

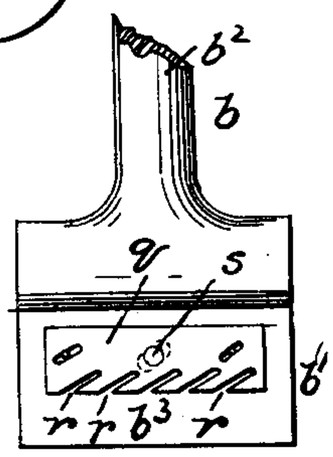

Fig. 7.

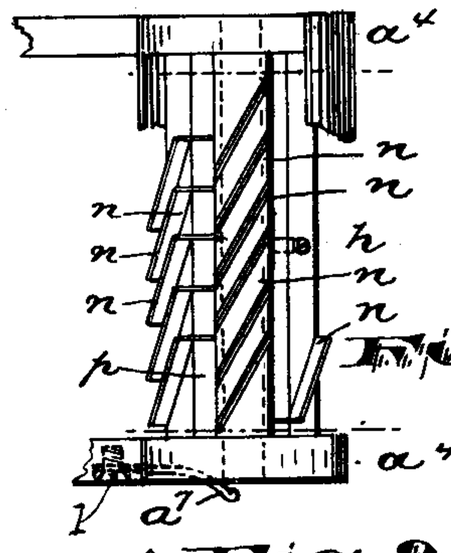

Fig. 8.

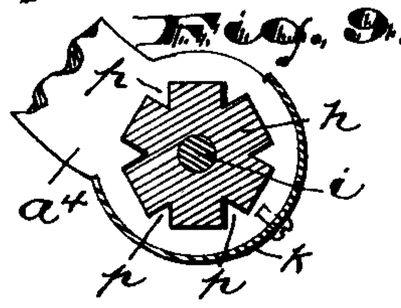

Fig. 9.

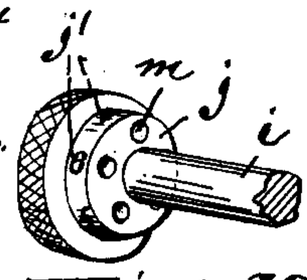

Fig. 10.

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UNITED STATES PATENT OFFICE.

GEORGE H. SMITH, OF YONKERS, NEW YORK, ASSIGNOR OF TWO-THIRDS TO JAMES H. FLEMING, OF NEWARK, AND JAMES WAYLAND, OF BELLEVILLE, NEW JERSEY.

HAT-BRIM NOTCHER.

SPECIFICATION forming part of Letters Patent No. 675,844, dated June 4, 1901.

Application filed October 27, 1900. Serial No. 34,555. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. SMITH, a citizen of the United States, residing at Yonkers, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Hat-Brim Notchers; 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to facilitate the operation of size-notching hats. Heretofore it has been the common practice to employ an ordinary scissors or shears in said operation, the size-marks being cut diagonally into the edge of the brim one by one in accordance with the size of the hat, one diagonal cut indicating the first size, two notches indicating size two, and so on, six notches indicating size six, usually being the largest in the series. By this operation considerable time was consumed and the hat-brim was often damaged to a greater or less degree by undue cutting, and because of inadvertence on the part of the workmen the hat was sometimes wrongly numbered, and when too many notches or cuts were once inserted it was a difficult matter to cure the mistake, involving a cutting down of the brim and a waste of material.

By my improved device the size marks or cuts are inserted uniformly and with proper regard for the depth of the cut into the brim, and the proper number of cuts are made at once and with great rapidity and without any danger of mismarking, it being understood that as a rule a large number of hats of a given size are marked one immediately after another, so that when the device is once adjusted to the desired size no further time or care is required in making the adjustments to complete the work in connection with a quantity of hats of the said given size.

The invention consists in the improved size-notching device for marking hats and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several views, Figure 1 is a side elevation of the improved implement or device. Fig. 2 is a front view of the same. Fig. 3 is a sectional view taken at line x of Fig. 2. Fig. 4 is a plan of the notch-cutting end of the device. Fig. 5 is an outside detail elevation of one of the prongs between which the cutter-carrier is arranged. Fig. 6 is an inside view of one of said prongs with the cutter-carrier (in section) in place. Fig. 7 is a detail plan of the platen end of the handled sections of the device, and Fig. 8 is a plan of the cutter-carrier and showing portions of the prongs in which it has its pivotal bearings. Fig. 9 illustrates in section a certain guard or casing inclosing the cutter-carrier, and Fig. 10 is a detail perspective view of a finger-piece for turning the cutter-carrier.

In said drawings, a b indicate a pair of handled bed-sections pivoted together at c and providing platen and cutter-carrier-supporting jaws a' b' at their forward extremities and at their opposite rear extremities providing the handles a^2 b^2, as shown in Fig. 1. The said jaws are held normally open or apart at their cutting extremities by a spring d of any suitable construction, and the handles are preferably provided with a stop pin or projection e to prevent undue pressure coming upon the cutting edges of the knives or cutters. A pin or projection f, Figs. 2, 3, and 4, may also be employed to limit the opening movement of the said sections. Said sections may also be provided with a lock or catch g, by which the said sections may be held closed or approximately closed while the implement is being carried in the pocket. At its forward or cutter-carrying extremity the section a is bifurcated, as shown more clearly in Figs. 2 and 4, and between the prongs a^4 a^4 thereof is pivotally arranged a cutter-carrying barrel or cylinder h, the said barrel being pivoted, as at i, between said prongs, and at one end, at the outer side of one of said prongs, having a finger-piece j, secured rig-

idly to the pivot *i* of the barrel, so that the barrel and finger-piece *j* may be turned together. The finger-piece *j* is preferably provided with a series of numbers *j'*, Fig. 10, which correspond with the number of cutting-blades in the series next adjacent thereto to facilitate the adjustment of said blades to effect a cutting, the numbers being especially useful when the blades are inclosed and hidden by the guard or case *k*.

I prefer to form an axial perforation through the barrel *h*, as indicated in Figs. 4, 6, and 9, and also form a similar perforation in the finger-piece. I thus may insert the shaft or pivot *i* directly through said parts and the perforations a^5, Fig. 5, in the prongs a^4 of the handled sections and fix the finger-piece *j* and the barrel *h* upon the said shaft *i* by set-screws, keys, or other suitable devices; but said barrel *h* may be formed and arranged in any other suitable way to accomplish the desired adjustments and operation hereinafter described.

The finger-piece *j* on its inner side is notched in accordance with the numbers on the periphery thereof, and on the outer side of the prongs a^4, next adjacent to said finger-piece, is formed a short slot or groove a^6, in which a spring a^7, Figs. 5 and 8, is arranged, the latter being held at one end by a screw *l* or other means, and at its opposite end having a normal tendency to press outwardly, as shown in Fig. 8. The free extremity is adapted to coincide with the notches *m*, and thus while the spring permits a turning of the cutter-carrier or barrel said spring tends to hold the barrel and the cutters in proper operative relation, as will be understood. The said cutter-carrier or barrel at its periphery is provided with series of slots which are disposed diagonally with reference to the axis of the barrel, the angle being about seventy-five degrees, more or less, and in the said slots are seated a series of cutting-blades *n*, which are thus disposed also diagonally and are preferably of hardened steel, the said series each differing in the number of blades contained therein. Upon the first seat of the barrel is a single diagonal cutter. In the next seat in order are two diagonal and parallel cutters. In the third seat there are three diagonal and parallel cutters, and so on up to the sixth seat, with six cutters, which ordinarily represent the highest size of hat and number of cutters desired by the hatter in sizing his hats. Between the slotted seats for the cutters are formed longitudinal grooves *p*, which permit a longitudinal adjustment of the blades.

Upon the handled section *b* is formed a flat seat or platen b^3, against which the cutting edges of the series of inclined or diagonal blades may bear with greater or less force to effect a notch-cutting. The depth of the notch is regulated and controlled by an adjustable stop-plate *q*, Fig. 7, which is provided with a series of inclined cutter-recesses *r* to receive the inner ends of the cutters. Said stop-plate *q* is adjustable in the direction of the said inclined recesses and is held in place by a set-screw *s*.

In operating the device the barrel or cutter-carrier is turned by the finger-piece to bring the desired cutter or cutters to a cutting relation to the platen, the stop is adjusted to secure the proper depth of the inclined cut, the brim edge of the felt is inserted, and the handles are pressed together, bringing the cutters against the platen, and thus effecting a cutting of the felt.

Having thus described the invention, what I claim as new is—

1. The improved hat-brim notcher herein described comprising handled sections *a*, *b*, pivotally joined, a spring for normally holding the jaws of said sections apart or open, a platen, formed on one of said jaws, having a series of inclined cutter-recesses, a rotary cutter-carrier pivotally arranged upon the other of said jaws, and a series of series of inclined cutting-blades, the inclined blades of one series differing in number from the number of blades in the next, and the blades of the several series being all adapted to enter the inclined recesses of the platen, substantially as set forth.

2. The improved hat-brim notcher herein described comprising handled sections *a*, *b*, having jaws, one of which is provided with a platen having a stop-plate *q*, with inclined notches *r*, and the other with a rotary cutter-carrier having a series of series of inclined cutting-blades, the blades of the several series increasing in number in regular arithmetical progression, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 29th day of September, 1900.

GEORGE H. SMITH.

Witnesses:
JAMES WAYLAND,
JAS. H. FLEMING.