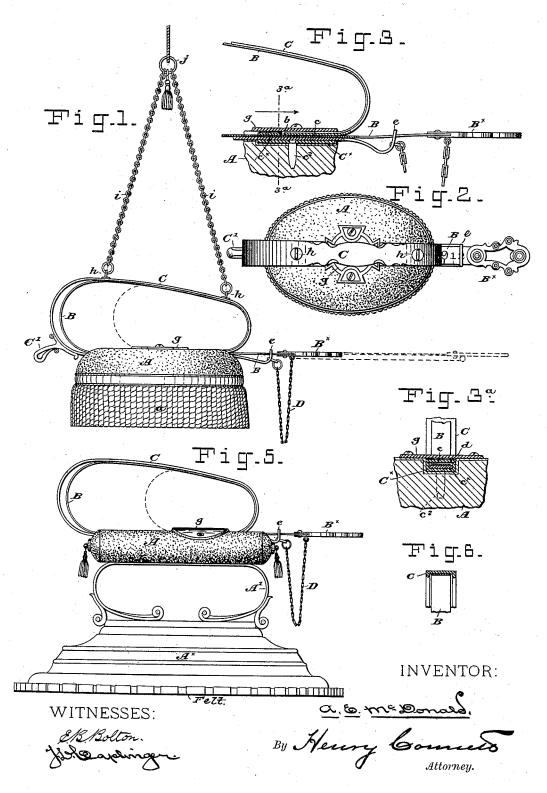
A. E. McDONALD.

HAND MEASURE FOR FITTING GLOVES.

No. 383,365.

Patented May 22, 1888.



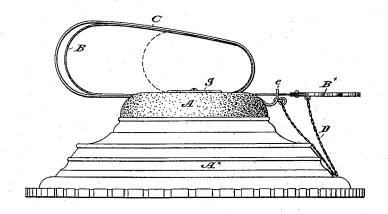
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Fig.4.



INVENTOR:

WITNESSES:

Attorney.

UNITED STATES PATENT OFFICE.

ALEXANDER E. McDONALD, OF BROOKLYN, NEW YORK.

HAND-MEASURE FOR FITTING GLOVES.

SPECIFICATION forming part of Letters Patent No. 383,365, dated May 22, 1888.

Application filed March 5, 1888. Serial No. 266,167. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER E. McDon-ALD, a citizen of the United States, residing in Brooklyn, Kings county, New York, have 5 invented an Improved Hand-Measure for Fitting Gloves, of which the following is a specification.

My invention relates to a device for measuring the hand in order to ascertain the size of 10 a glove that will fit. In this class of handmeasuring devices there is a support for the hand, which is placed palm downward thereon, and a loop-like graduated measuring-tape mounted on said support. When this tape is 15 drawn down over the knuckles, the size or measure is indicated by a stationary keeper, through which the tape is threaded. Steel is the most suitable material for the tape that I have found, and when made thin enough to 20 properly serve the purpose the tape is quite fragile, and the upwardly-projecting tape-loop through which the hand is thrust is greatly exposed to injury from careless usage.

The object of my present invention is, in part, to provide a hoop-like housing and guard for the loop-like tape, which guard also serves as a means of suspending the hand measure or as a handle therefor; in part to provide means for suspending the measure, and in part to provide means for limiting the distance the

tape may be drawn out.

Other minor features of the invention will be referred to hereinafter.

My invention will now be minutely de-35 scribed, and its novel features carefully defined in the claims.

In the drawings which serve to illustrate my invention, Figure 1 is a side elevation of a suspended hand measure provided with my 40 improvements, and Fig. 2 is a plan of the same. Figs. 3 and 3° are sectional views, on a larger scale and detached, of a part of the hand-measure. These views will be referred to hereinafter. Fig. 4 is a side elevation of a 45 hand measure with a base provided in part with my improvements, and Fig. 5 is a side elevation of another form of hand measure, also provided in part with my improvements. Fig. 6 is a cross-section illustrating a slightly-modified form of the tape guard.

In all the principal figures, A represents a

support for the hand to be measured. This support I prefer to cover with plush or other soft material.

B represents the graduated measuring tape, 55 made, preferably, of thin steel. It is provided with any suitable handle or thumb-piece, B*.

C represents the hoop-like protecting shield or guard for the loop-like tape. This I usually form of a strip of sheet metal of suitable thick- 60 ness and width, bent to the shape the loop is designed to take when fully expanded. The details of construction of this guard, the manner in which the tape is mounted in it, and in which the whole is mounted on the hand-sup- 65 port A, are best illustrated in the enlarged sectional views, Figs. 3 and 3a, the former of which is a longitudinal and the latter a transverse section. In these views it will be seen that the end c of the guard C overlaps the end 70 c^{\times} , and the two are rigidly connected by a stirrup-plate, C', so as to leave between them a passage, d, for the tape B to play through. This passage may, however, be formed in other ways. The end c^{\times} of the guard extends out- 75 ward, and is provided with a slot-like keeper, e, through which the tape also passes and plays. This keeper forms the stationary indicator or marker for the measure. In the end c^{\times} of the guard is a spur or stud, c^{2} , which 80 enters the base or support and prevents the guard from slipping, while a plate, g, serves to hold all down to said support or base. The fixed end b of the tape is secured to the overlapping end c of the guard C by forming a slit 85 or recess in said end c and turning down a lip on the end of the tape to engage said recess, the plate g holding the lip in engagement. Of course the end b of the tape may be secured in any suitable manner. That described will be 90 found simple and satisfactory. Normally, the fragile tape lies close to the inner face of the guard C, and is protected thereby from injury. The guard is also given the proper flattened or semi-elliptical form it is desired the tape- 95 loop shall assume when expanded, and the loop is thus made to conform by its resiliency to said shape and lie close to the guard.

In Fig. 1 the tape is shown in full lines as drawn out a little, and so as to stand off a little way from the guard at the left. This is merely for purposes of illustration.

In order that the tape may not be drawn out too far from careless handling, and be thus snapped off, I provide a guard chain or cord, D, one end of which is secured to the handle B^{\times} of the tape and the other end to some fixed part, preferably to the end c^{\times} of the guard C. This chain limits the extent to which the tape may be drawn out, as indicated in dotted lines in Fig. 1.

Fig. 1 illustrates my hand-measure as suspended for use. In the crown of the guard C are fixed two rings, h h, or the like, to which are secured chains i i, or like suspenders, that are attached to a suspended ring, j. The handsupport A may be of oval form and be ornamented with fringe a, or be given a tasteful appearance in any suitable manner. In taking a measure with the suspended device the glove-salesman takes the handle B× of the tape between the thumb and finger of one hand and steadies the device by grasping the thumb-piece C' on the opposite side of the guard with the other hand.

Fig. 4 illustrates the application of the guard 25 C to a hand-measure having a base, A[×], to set on a counter or table. Otherwise the construction is the same as that illustrated in Figs. 1, 2, 3, and 3^a.

Fig. 5 shows a slight variation in the construction, wherein the hand-support A is mounted on an open or ring-like pedestal, A', on the base A*. This construction enables the hand which is being measured to grasp the hand-support, as the open pedestal allows room for the thumb. The hand-support A in this construction may be made somewhat cylindrical or elongated in form, so that the fingers can clasp it. In the construction illustrated in Fig. 4 the palm of the open hand that is being measured merely rests on the support.

Where my improvements are applied to hand-measures of substantially the forms illustrated in Figs. 4 and 5, the guard C serves a useful purpose as a convenient handle for lifting the measure when moving it about.

The guard C might have short pendent mar-

ginal flanges, as seen in the cross-section, Fig. 6, to house the tape laterally and provide a recess to receive it. However, the tape is so thin and lies so close to the inner face of the 50 guard that such a precaution will not usually be required.

Having thus described my invention, I

1. In a hand-measure for fitting gloves, the 55 combination, with a hand-support, of a hoop-like guard, as C, mounted on said support and provided with a passage for the free end of the tape, and the said tape formed of some suitable material of the character described, and 60 mounted within the said guard, substantially as set forth.

2. In a hand-measure for fitting gloves, the combination, with a hand-support, of a hoop-like guard, as C, mounted on said support and 65 provided with a passage for the free end of the tape, the tape B, mounted within said guard, and the suspenders or chains by which the measuring device is suspended attached to said guard, substantially as set forth.

3. In a hand-measure for fitting gloves, the combination, with the hand-support and the securing-plate g, of the hoop-like guard C, having its ends overlapped and provided with a spur, c^2 , a keeper, e, and a passage, d, for the 75 tape, and the said tape secured at one end to said guard and arranged within the same, substantially as set forth.

4. In a hand-measure for fitting gloves, the combination, with the guard C and the hand- 80 support, of the tape B, mounted in said guard, the keeper, through which the tape plays, and the limiting chain or cord D, all arranged to operate as set forth.

In witness whereof I have hereunto signed 85 my name in the presence of two subscribing witnesses.

ALEXANDER E. McDONALD.

Witnesses:

HENRY CONNETT, J. D. CAPLINGER.