

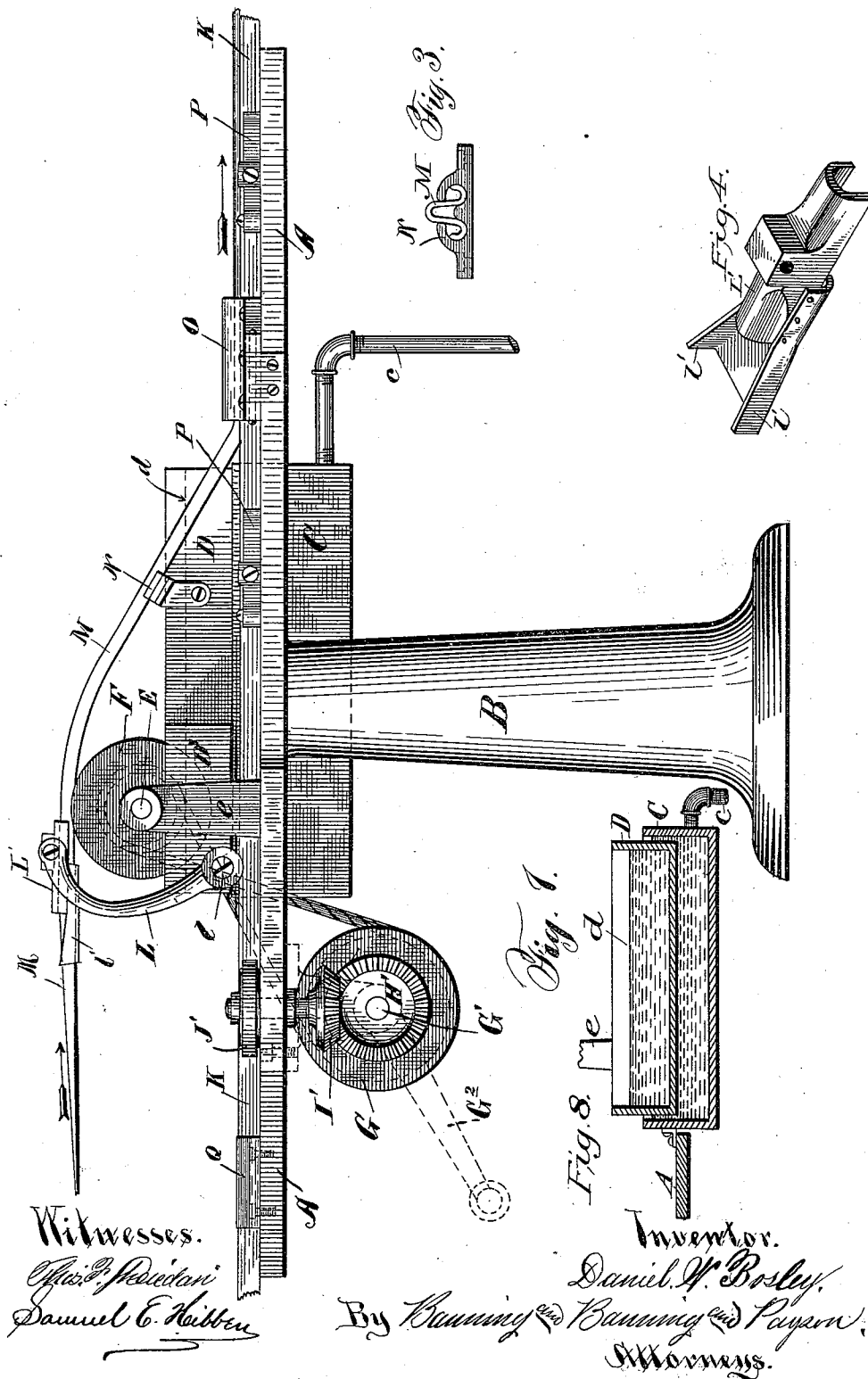
(No Model.)

2 Sheets—Sheet 1.

D. W. BOSLEY.
WEATHER STRIP MACHINE.

No. 512,271.

Patented Jan. 9, 1894.



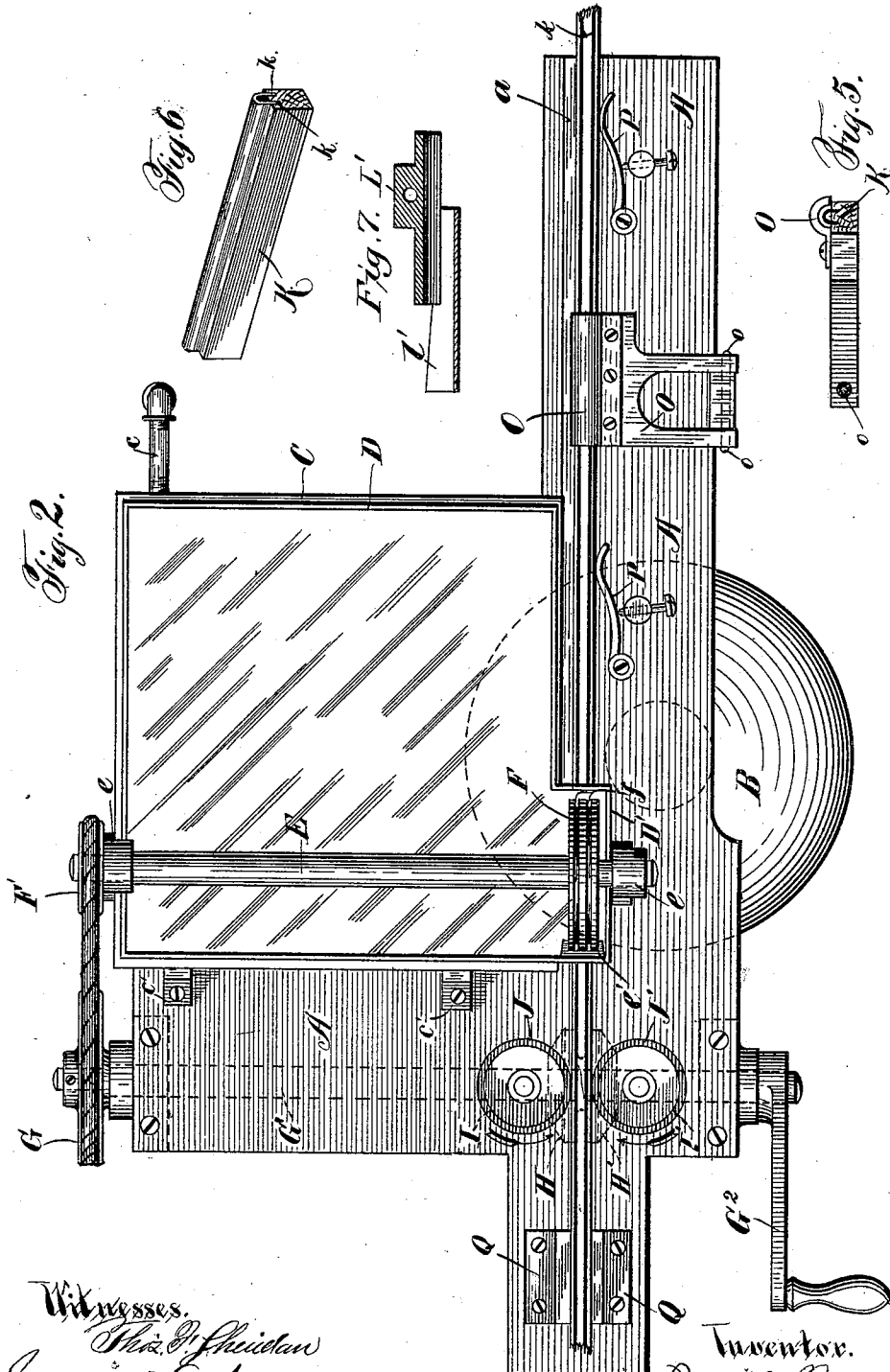
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Witnesses.
Chas. F. Friedman
Samuel E. Heibben

Inventor.
Daniel W. Bosley.
By *Baumgardner & Baumgardner*
Attorneys.

UNITED STATES PATENT OFFICE.

DANIEL W. BOSLEY, OF CHICAGO, ILLINOIS.

WEATHER-STRIP MACHINE.

SPECIFICATION forming part of Letters Patent No. 512,271, dated January 9, 1894.

Application filed November 22, 1892. Serial No. 452,760. (No model.)

To all whom it may concern:

Be it known that I, DANIEL W. BOSLEY, a citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Weather-Strip Machines, of which the following is a specification.

The object of my invention is to make a machine for applying glue to the rubber or felt cushion for weather strips, and then applying the cushion so provided with glue to the strips; and my invention consists in the features, arrangements and combinations hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of my improved machine. Fig. 2 is a plan view of the same, with the parts removed. Figs. 3, 4 and 5 are views of details; and Fig. 6 is a perspective view of the weather strip after the cushion is applied. Fig. 7 is a sectional elevation of a portion of my mechanism taken on the line 7 of Fig. 4; and Fig. 8 is a sectional elevation taken on the line 8 of Fig. 2, looking in the direction of the arrows.

In making my improved weather strip machine for applying the glue to the cushion, and the cushion to the strip, I arrange a table A, suitably supported on a standard or bracket B. I support on the table, in any suitable manner, a pan C, adapted to hold hot water or waste steam, which may be led into the same through a pipe *c*. As shown in the drawings, the heating pan C is supported by angle irons or brackets *c'*, though, as above said, it may be supported in any desired way. I arrange another pan D, which I will term a glue pan, by making it of a size to fit neatly within such pan, but so that it can be easily inserted or removed. This pan is intended, as its name indicates, to contain the glue in a fluid condition, ready for use. I arrange a shaft E above the glue pan, suitably supported in standards or brackets *e*. I mount on this shaft a wheel F, provided with circumferential grooves *f* in its periphery. To accommodate the wheel, I prefer to extend the glue pan enough at one corner to inclose the wheel, as shown particularly in Fig. 2. The lower edge of the wheel is intended to extend down below the surface of the glue, which is indicated in Fig. 1 by dotted lines *d*.

This enables the wheel as it is rotated to be constantly supplied with glue, which, as the wheel turns, is rubbed off, except in the circumferential grooves, by a scraper *e'*. At the opposite end of the shaft E is arranged a pulley F', which is adapted to be connected by a belt or cord to a pulley G on another shaft G', which extends through under the table properly supported in brackets, and which is provided at its end with a crank or handle G² to permit it to be turned. I arrange on the shaft G' two beveled pinions H, H', so that they are rotated with the shaft. These pinions engage or intermesh with beveled pinions I I', supported on vertical spindles, carrying feed rollers J J' at their ends on the upper side of the table. These feed rollers are intended to advance the weather strip K, and feed it along in the operation of the machine. The weather strip is provided at its edge with longitudinal grooves *k*, of a size and shape corresponding to the circumferential grooves in the wheel F. I arrange an arm L on a pin *l*, in convenient position with reference to the wheel F. This arm carries a guide L' at its upper end, adapted to be moved into position over the wheel F. The rubber, felt, or other cushion, M, passes through this guide, and, as it advances, its edges are folded or turned down by the wings or flanges *l'* of the guide, so that as they pass over the wheel F, they will be pressed down into the circumferential grooves to have the glue applied to them. As the cushion advances after being supplied with glue, it passes through a spreader N, which evenly distributes the glue over its under surface, or the surface intended to be applied to the weather strip. As the cushion further advances, it passes under another guide O, which bears against its upper surface, so as to press its edges down securely into the grooves of the weather strip, where they will be held by the glue, as shown in Fig. 5. It will of course be understood that, at the commencement of the operation, the forward end of the cushion is arranged in place in the grooves of the weather strips and fastened, so that the cushion will be drawn along as the weather strip is advanced by the feed rollers. To hold the weather strip in proper position to pass under the guide O to receive

its cushion, I arrange a bar *a* along the table, which limits the movement of the strip in that direction, and I provide tension springs *P* at the other side, to prevent the strip from spring-
 5 ing out of place as it is advanced forward. By means of thumb screws, these tension springs may be adjusted to suit different thicknesses of strip. I also prefer to hinge the guide *O*, as at *o*, so that when it is desired
 10 to take out or put in a strip, it may be turned back on its hinge or pivotal point. To hold the other end of the strip as it is approaching the feed rollers, I also prefer to employ guides *Q*, which make the strip advance in a straight
 15 and even manner.

It will also be understood that while I have described my invention with more or less minuteness as to details, I do not intend to limit myself unduly thereto, but contemplate
 20 changes in form, construction and arrangement, and the substitution of equivalents, as circumstances may warrant or necessity demand.

What I regard as new, and desire to secure
 25 by Letters Patent, is—

1. In a weather strip machine, the combination of a vessel adapted to hold glue in a fluid condition, a guide for holding the weather strip cushion in position to receive
 30 the glue, a grooved wheel for applying the glue on the edges of the rubber cushion, means for feeding the weather strip forward, and means for applying the cushion thereto, substantially as described.

35 2. In a weather strip machine, the combination of a vessel adapted to contain glue in a fluid condition, a guide for holding the

weather strip cushion in position to receive glue, a grooved wheel for applying the glue on the edges of the rubber cushion, means for
 40 spreading the glue on that portion of the cushion adapted to enter the weather strip, and means for applying the cushion thereto, substantially as described.

3. In a weather strip machine, the combination of a vessel adapted to contain glue in a fluid condition, a guide for holding the weather strip cushion in position to receive the glue, a grooved wheel having one portion
 50 inserted in the glue and adapted to supply glue during its rotation to the edges of the rubber cushion, means for feeding forward the weather strip, means for applying the cushion thereto, and guides for holding the weather strip in position to have the cushion
 55 applied, substantially as described.

4. In a weather strip machine, the combination of a vessel adapted to contain glue in a fluid condition, a guide for holding the weather strip cushion in position to receive
 60 the glue, a grooved wheel having one portion inserted in the glue and adapted to supply glue during its rotation to the edges of the rubber cushion, means for spreading the glue on that portion of the cushion adapted to enter the weather strip, means for feeding the weather strip forward, means for applying the cushion thereto, and guides for holding the weather strip in position to have the cushion
 65 applied, substantially as described.

DANIEL W. BOSLEY.

Witnesses:

EDW. F. BOSLEY,
 THOMAS F. SHERIDAN.