

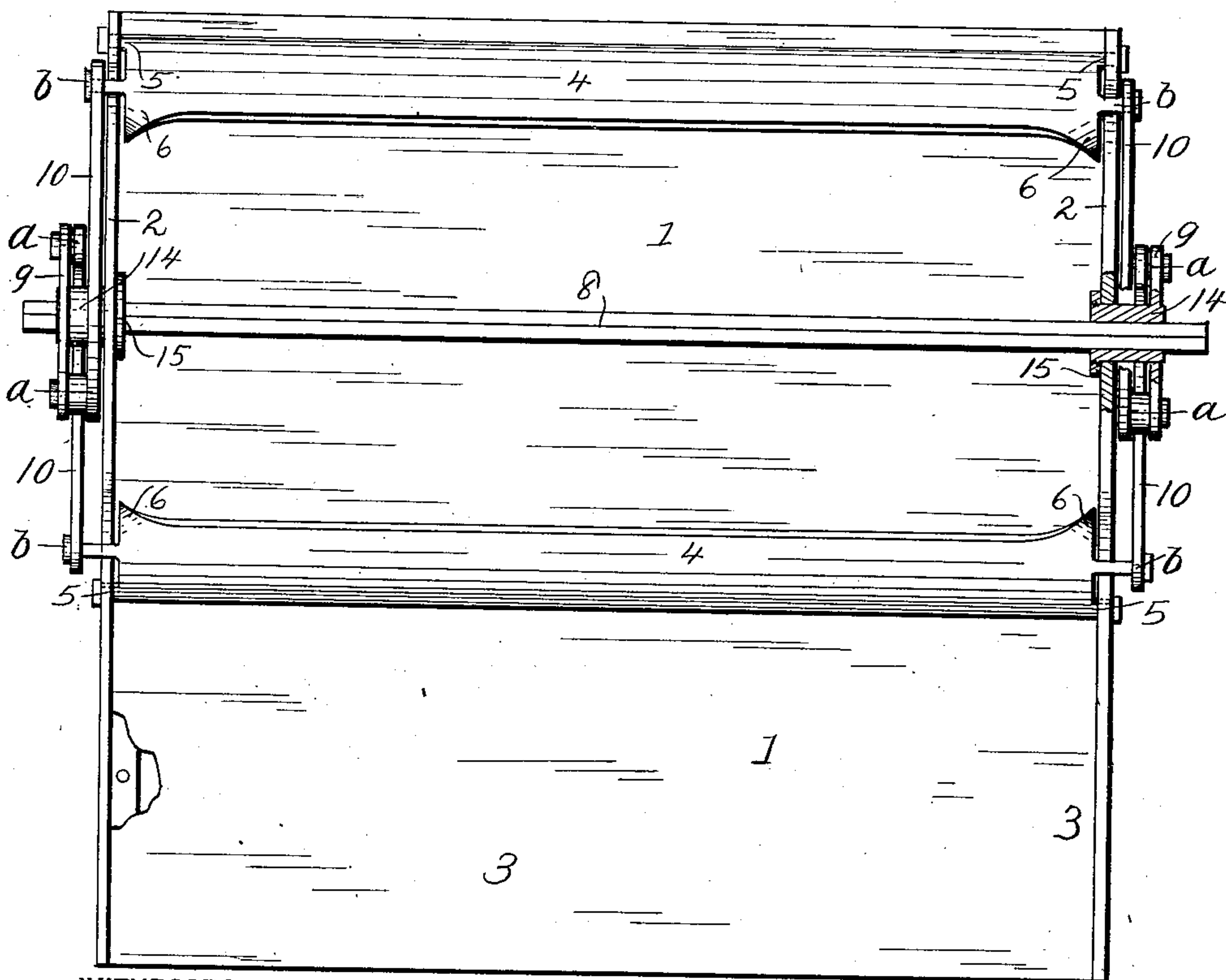
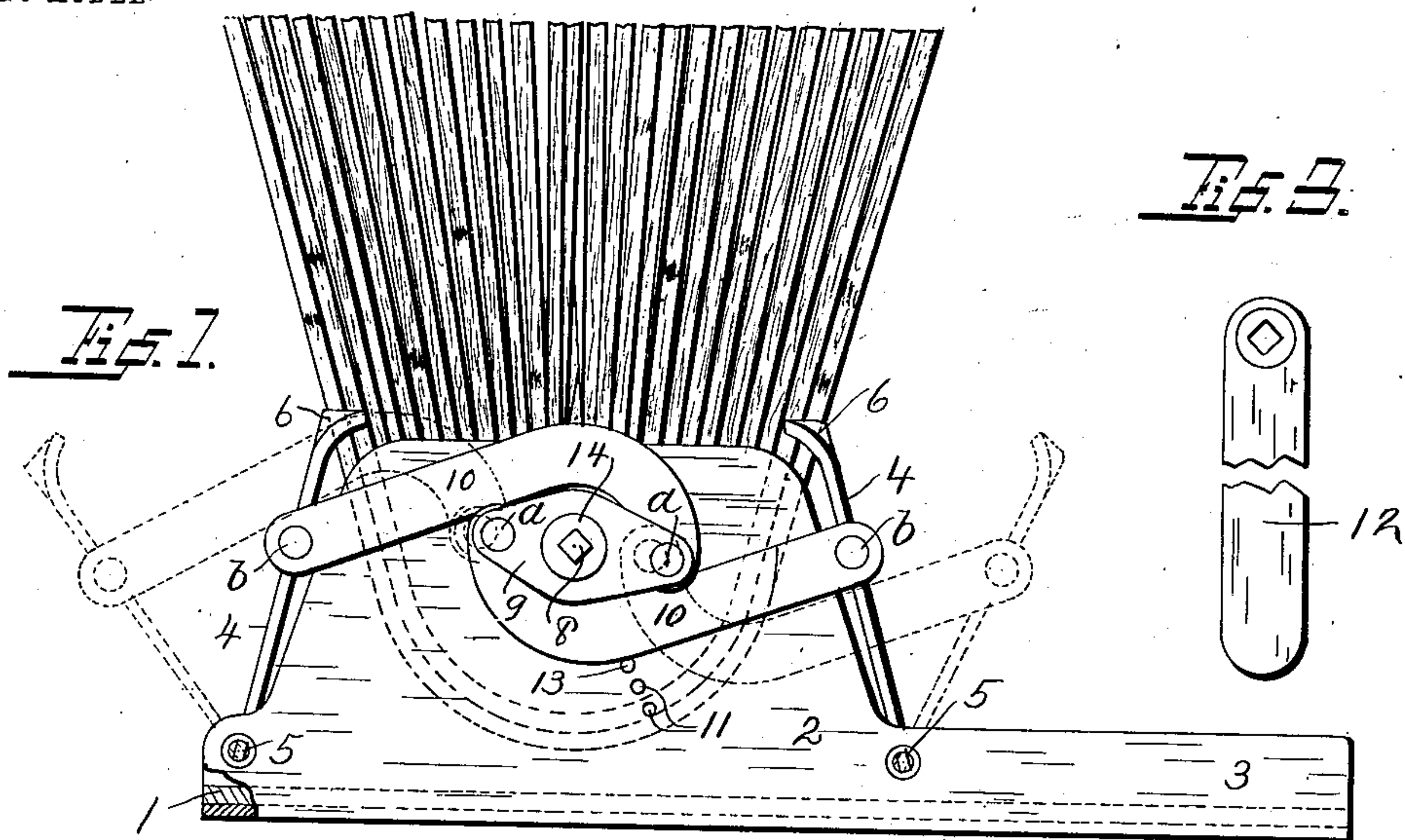
No. 735,781.

PATENTED AUG. 11, 1903.

F. E. KRAUTH.
FOOT SCRAPER.

APPLICATION FILED MAR. 4, 1903.

NO MODEL.



WITNESSES:

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FERDINAND E. KRAUTH, OF HEBRON, NORTH DAKOTA.

FOOT-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 735,781, dated August 11, 1903.

Application filed March 4, 1903. Serial No. 146,055. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND E. KRAUTH, a citizen of the United States, residing at Hebron, county of Morton, and State of North Dakota, have invented new and useful Improvements in Foot-Scrapers, of which the following is a specification.

My invention relates to improvements in foot-scrapers.

The object of the invention is to provide a comparatively inexpensive form of device for holding straw, hay, or brush with the ends projecting vertically, whereby the same may be utilized for cleaning footwear, which device may be adjusted to release such material, whereby the same may be removed and replaced at pleasure.

A further object of the invention is to provide a form of construction in which material such as straw, hay, or brush may be securely clamped and automatically locked in the clamping position against accidental adjustment to a position of release.

In the following description reference is had to the accompanying drawings, in which—

Figure 1 is an end view of the invention in clamping position, with dotted lines indicating the position of release. Fig. 2 is a plan view of the device with the scraping material removed. Fig. 3 is a detail of the clamping-key.

Like parts are identified by the same reference characters throughout the several views.

The base-plate 1 is provided with end walls 2, one of said walls having a projecting portion 3, forming a scraping edge. Clamping-plates 4 are pivotally secured at their respective ends to the walls 2 at 5, and their upper corners 6 are bent inwardly, as shown. These clamping-plates 4 are actuated by means of a rod 8, extending longitudinally of the device through suitable apertures in the central portion of the respective walls. This rod is provided at each end with a lever 9, centrally secured to the rod. The outer ends of each lever are connected with the clamping-plates 4 by links 10, having pivotal connection with the lever 9 at *a* and with the clamping-plates at *b*.

It will be observed that each link 10 is curved and when in clamping position extends from its clamping-pivot *b* past the rod

8 and across the line of centers of said rod 8 and the clamping-pivot to the lever-pivot *a*, whereby the lever is automatically locked in clamping position. The links are curved to prevent them from contact with each other or with the rod 8 before reaching the clamping position. In order to prevent the clamping-plates from becoming accidentally released, the supporting end walls may be provided with holes 11, in which a pin 13 may be inserted, such pin projecting in the path of the lower link 10, whereby it is locked in its clamping position. This pin will also be found useful when the quantity of material inserted is too great to permit the inner ends of the links to pass the line of centers when the material is clamped. As there are several holes 11, the pin 13 can be adjusted in any one of them in correspondence to the position of the link when the proper clamping-pressure is secured. With the arrangement of the links as above described, however, the reactionary pressure of the material clamped between the clamping-plates has no tendency to release the plates from their clamping position. The rod 8 is actuated by means of a key 12, Fig. 3.

Referring more specifically to the constructional details, it will be observed, Fig. 2, that the lever 9 is provided with a hub 14, the aperture in the end walls 2 being made large enough to receive the hub, which is secured in position by a holding disk or washer 15 adjusted to its inner end. The actuating-rod 8 is angular in form (preferably square in cross-section) and extends through the corresponding aperture in the hub 14. The lever 9 is rigidly secured to the hub, so that when the rod 8 is turned the hub and lever will turn with it.

In operation the rod 8 is adjusted with the lever and clamping-plates in the position shown in dotted lines in Fig. 1. The rod may then be removed from the device, hubs 14 serving to retain the levers 9 in position. When the rod 8 is removed, any suitable material—such as straw, hay, brush, or broom-corn—may be laid transversely of the upper edges of the clamping-plates and then pressed downwardly between the plates until the rod 8 can be reinserted above the material to the position in which it is shown in Fig. 2. The key is

then applied to the rod and the latter rotated to adjust the rod and lever in the position in which it is shown in Fig. 1, when the clamping-plates will be drawn inwardly against the material, causing the ends of the latter to project upwardly, as shown. The inwardly-projecting corners 6 of the clamping-plates form gathering-arms, which prevent the material from spreading longitudinally and facilitate holding it in a position to constitute a brush. The ends of the material forming the brush may then be trimmed with a pair of shears and the device is ready for use. The part 3 of one of the walls is intended to be used as an auxiliary scraper when the footwear is heavily covered with mud, the footwear being subsequently passed over the brush held by the clamping-plates for a final cleaning.

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

1. In a device of the described class, the combination with a suitable support, of a set of clamping-plates; an actuating-rod journaled in said support and provided with clamping-levers; links connecting said clamping-levers with the clamping-plates, and means for locking the levers in clamping position.

2. In a device of the described class, the combination with a suitable support, of a set of clamping-plates pivotally secured to said support; an actuating-rod journaled in said support between the clamping-plates and provided with a clamp-actuating lever; links pivotally connected with said lever and the respective clamping-plates, said links being curved and arranged to extend, when in clamping position, from the pivot-point of clamping-plate attachment beyond the actuating-rod and across the line of centers of the actuating-rod and clamping-plate pivot.

3. In a device of the described class, the combination with a suitable support, of relatively adjustable clamping-plates secured thereto; a binding-rod mounted between the clamping-plates; actuating connections be-

tween the binding-rod and a clamping-plate; means for locking said clamping-plates in clamping position; and a brush, doubled about said rod and engaged by said plates.

4. In a device of the described class, the combination with a suitable base-plate, of relatively adjustable clamping-plates pivotally secured to the base-plate; a binding-rod supported from the base-plate between said clamping-plates; means for transmitting motion from said rod to the plates; and a brush removably secured between the clamping-plates and bound in position by a cooperative action of the rod and plates.

5. In a device of the described class, the combination with a suitable base-plate, an actuating-rod supported therefrom; clamping devices pivotally secured to the base-plate on each side of the rod and projecting convergently above the rod when in clamping position; and flexible material doubled around the rod, with upwardly-projecting end portions engaged by the clamping devices.

6. In a device of the described class, the combination with a suitable support; an actuating-rod connected therewith; levers rigidly secured to the rod; clamping-plates pivotally connected with the support and linked to said levers, said rod being located intermediate of the clamping-plates, and adapted to serve as a binding for material engaged by the said plates.

7. In a device of the described class, the combination of a base-plate having raised end walls; a rod extending longitudinally over the base-plate through apertures in the end walls; motion-transmitting connections between the rod and clamping-plates, and means for locking said plates in clamping position.

In testimony whereof I affix my signature in the presence of two witnesses.

FERDINAND E. KRAUTH.

Witnesses:

FRED SCHWEIGERT,
HENRY GROTH.