

No. 664,413.

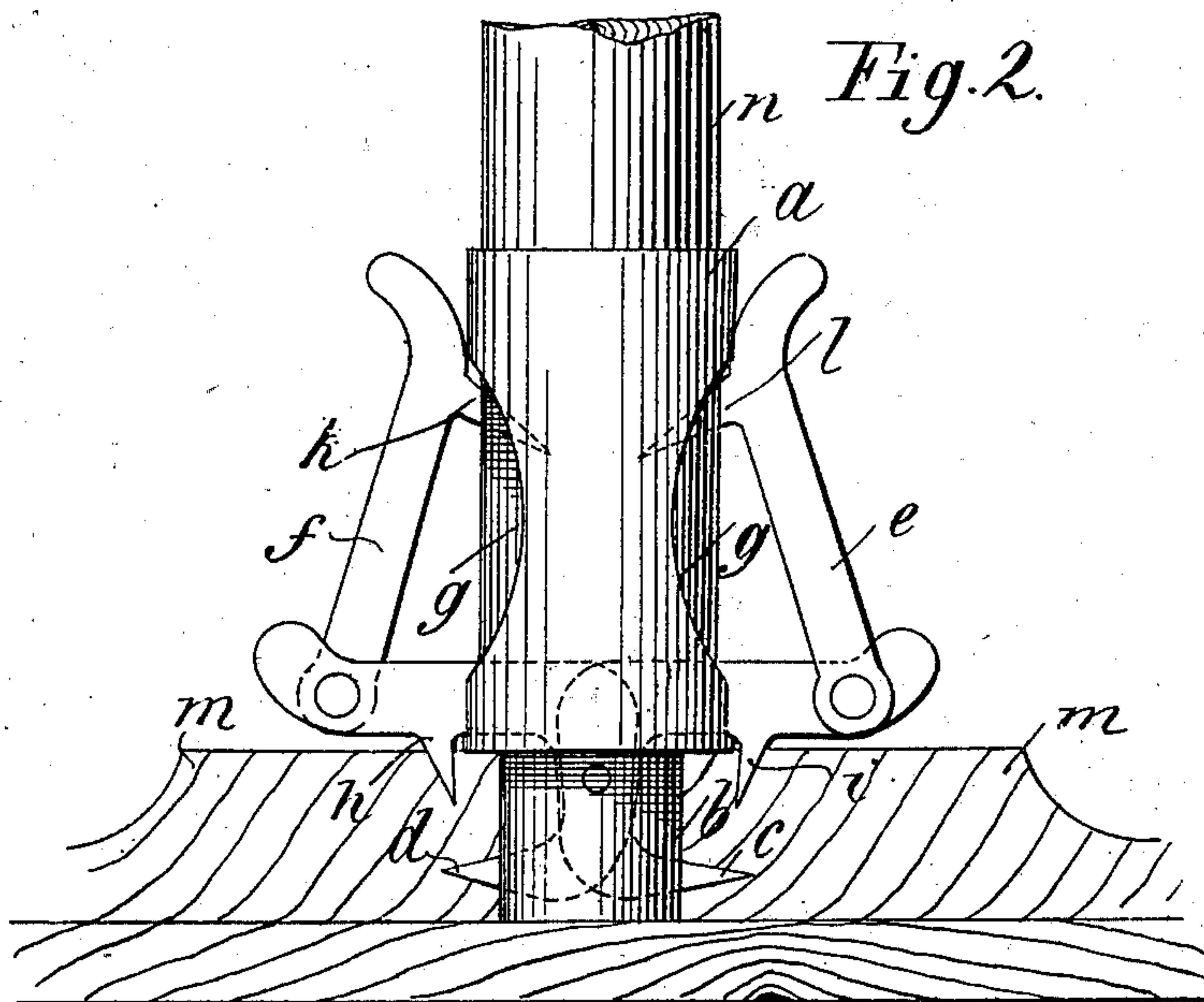
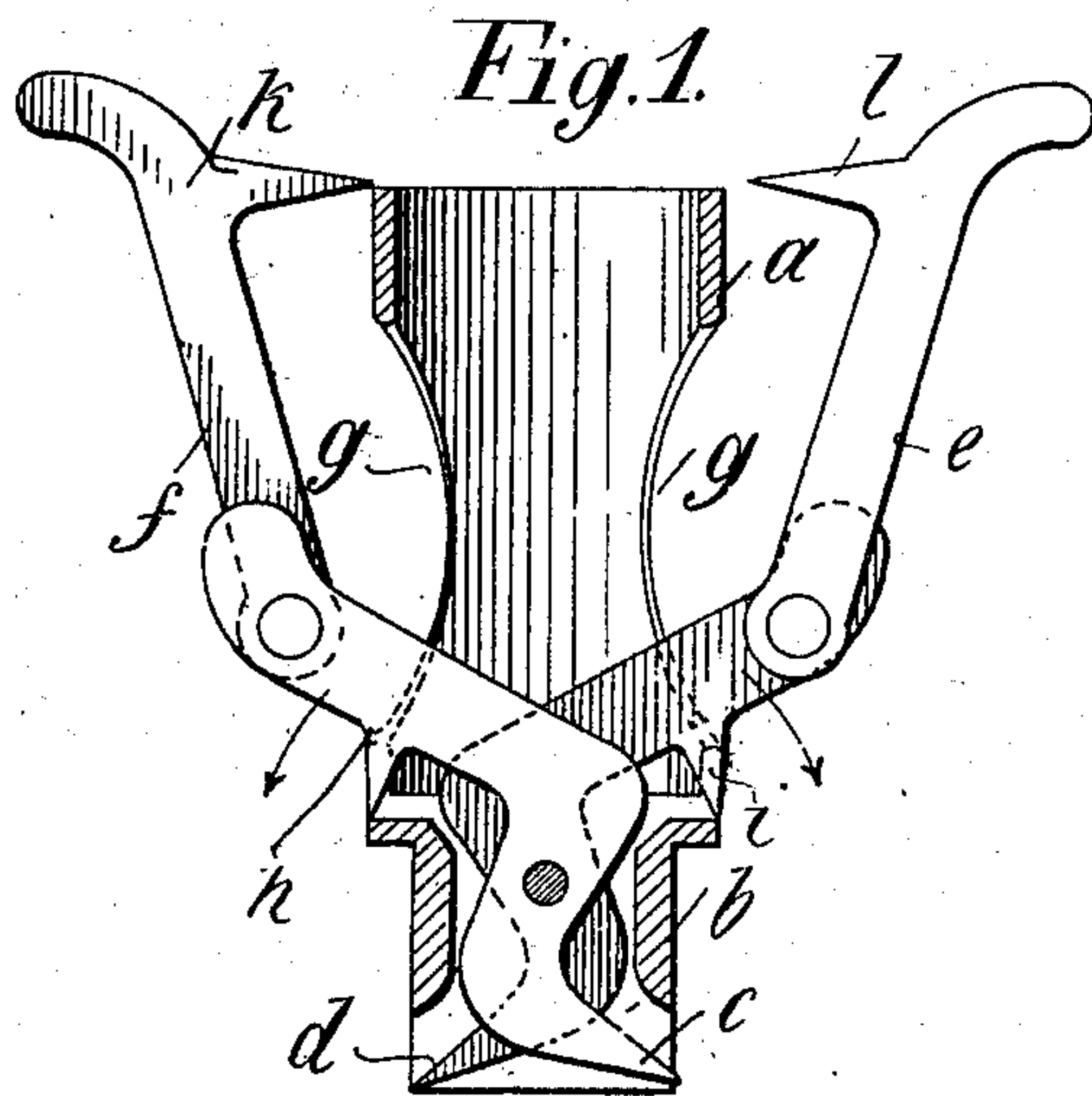
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W. KNIEPER.

DEVICE FOR SECURING HANDLES OF BROOMS, SCRUBBING BRUSHES, &c.

(Application filed Aug. 18, 1900.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

WILHELM KNIEPER, OF DORTMUND, GERMANY.

DEVICE FOR SECURING HANDLES OF BROOMS, SCRUBBING-BRUSHES, &c.

SPECIFICATION forming part of Letters Patent No. 664,413, dated December 25, 1900.

Application filed August 18, 1900. Serial No. 27,355. (No model.)

To all whom it may concern:

Be it known that I, WILHELM KNIEPER, military pensioner, a subject of the German Emperor, residing at Dortmund, in the Empire of Germany, have invented new and useful Improvements in Devices for Securing the Handles of Brooms, Scrubbing-Brushes, and other Implements or Tools, of which the following is a specification.

10 The present invention relates to improved means for securing the handles of brooms, scrubbing-brushes, and other implements or tools, the objects aimed at by the invention being to render the handle easily interchangeable and to render the connection between
15 the handle and the main body of the broom, scrubbing-brush, and other tool or implement reliable during a prolonged use.

Further objects are to simplify and cheapen
20 the construction and to render more efficient, serviceable, and durable in operation this class of devices.

With these ends in view the invention consists in the novel combination and in the peculiar construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings,
25 and then specifically defined in the appended claims.

30 I will now preceed to describe my invention more fully, reference being had to the accompanying drawings, in which—

Figure 1 illustrates a vertical section through my improved device. Fig. 2 shows
35 a front elevation of my improved device in its application.

Referring to the drawings, my improved device comprises the following parts: A tubular portion *a*, made of any suitable material,
40 preferably metal, possesses at its lower end a narrower portion *b*, in which two hooks *c d* are located movable around a common pivot. The points of these two hooks point in opposite directions and are enabled to project from
45 the tubular shaft *b*, in which latter openings are provided for the purpose. The two hooks *c d* constitute the lower members of a pair of joint-levers *e f*, to the upper members of which they are pivoted. The tubular portion *a* is
50 provided at each side with apertures *g* to en-

able the movements of the aforesaid joint-levers. The upper arms of the hooks *c d*, which project from the tubular portion *a*, are provided with outwardly-directed points *h i*. The upper members *e f* of the joint-levers are
55 provided near their top ends with inwardly-directed points *k l*, and the top ends of the two members *e f* are shaped to constitute handles, for which purpose they are preferably turned outward.
60

My improved device, constituted and constructed as hereinbefore described, is employed in the following manner: After inserting the shaft portion *b* into the previously-prepared hole in the broom-body or in the
65 body of any other implement or tool the handle *n* is pushed into the tubular portion *a*, when it will encounter the lower members of the joint-levers which carry the hooks *c d* and *h i*. Continued pressure on the handle *n*
70 causes these two lower members to turn around their pivot in the shaft *b*, thereby forcing the hooks *c d* out of the shaft *b* and into the body portion *m* of the broom or other implement, while the hooks *h i* simultaneously
75 enter said body portion from the top. The upper members *e f* of the joint-levers, which carry on the surfaces facing one another the downwardly-inclined hooks *k l*, are moved downwardly during the aforesaid turning of
80 the lower members of the joint-levers, thereby causing the hooks *k l* to enter the handle *n*. By exercising additional pressure on the handles of the lever members *e f* the hooks *k l*, *h i*, and *c d* are further driven into the handle
85 *n* and the body portion *m*, respectively, until the hooks have fully entered same. The parts of the device then occupy the position in regard to the tool and handle which is illustrated in Fig. 2. The separation of the
90 two parts of the tool or implement can be effected in a simple and speedy manner by actuating the angle-levers in a reverse way.

I wish it to be understood that I do not confine myself to the exact construction of the
95 various organs constituting my improved device, as shown and described, as obviously many changes can be made without departing from the spirit of my invention. It is further obvious that the size of the device
100

and the diameter of the tubular portion and of the bottom end may vary in accordance with requirements.

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

1. An improved device for securing the handles of brooms, scrubbing-brushes and other implements or tools comprising in combination a tubular portion having a narrower bottom end, and a pair of joint-levers provided with a plurality of hooks acting in opposite directions, substantially as set forth.

2. An improved device for securing the handles of brooms, scrubbing-brushes and other implements or tools comprising in combination a tubular portion having a narrower bottom end and a plurality of lateral openings, and a pair of joint-levers provided with a plurality of hooks acting in opposite directions, the lower members of said joint-levers

being movable around a common pivot in the bottom end of the tubular portion, substantially as described and shown.

3. The combination of a tubular portion having a narrower bottom end and a plurality of lateral openings, with a pair of joint-levers, acting in opposite directions, said angle-levers having their lower members movable around a common pivot in the bottom end of the tubular portion and provided with outwardly-directing points, while the upper members are provided with inwardly-directing points and handle portions, substantially as described and shown.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILHELM KNIEPER.

Witnesses:

WILLIAM ESSENWEIN,
PETER LIEBER.