J. P. RAYMOND & C. E. BAKER.

SCRUBBING DEVICE.

APPLICATION FILED APR. 18, 1906.

954,541. **Patented Apr. 12, 1910.**

Fig. 1

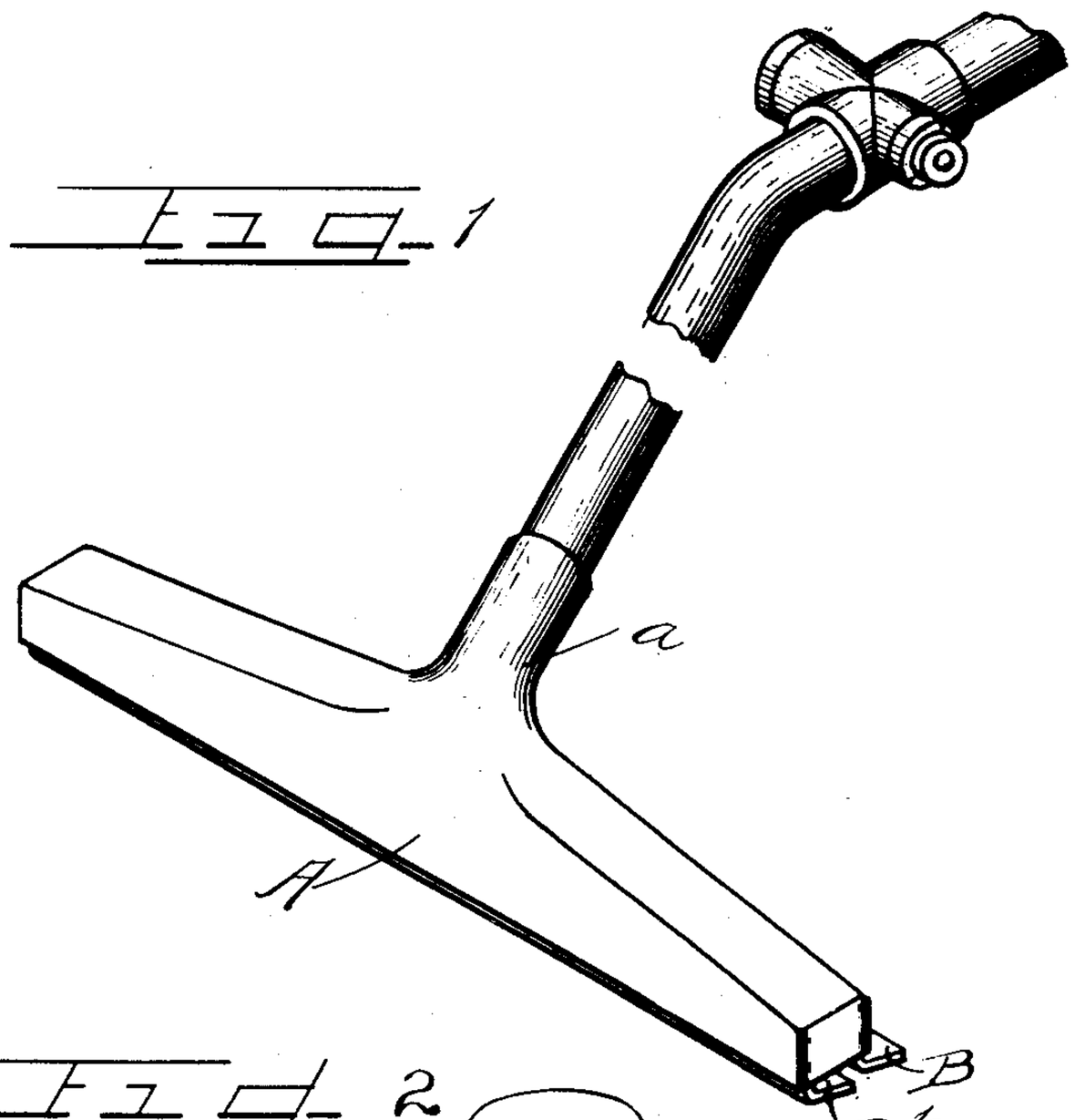


Fig. 2

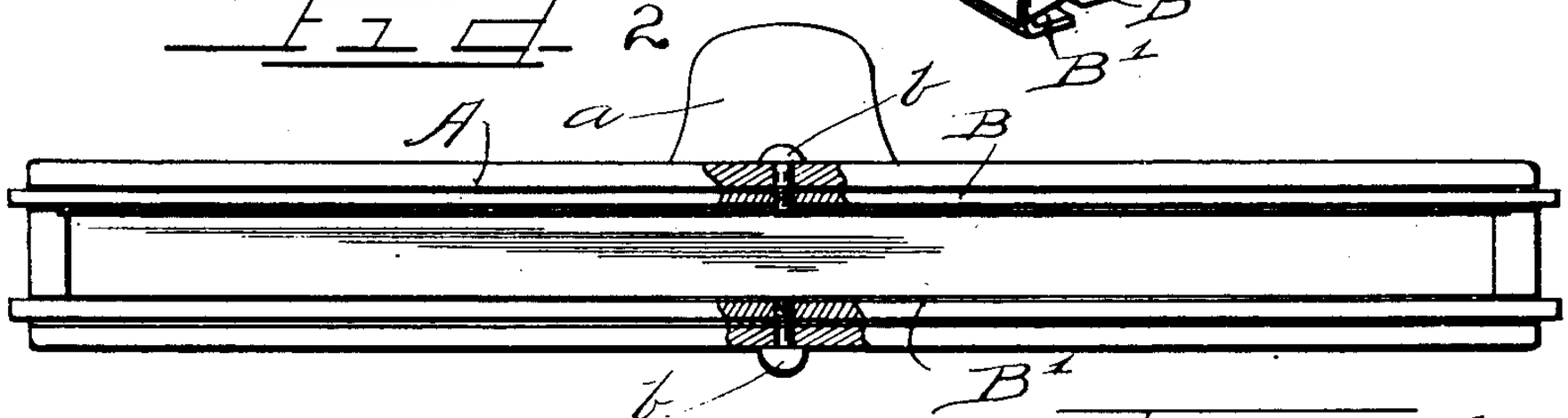


Fig. 3

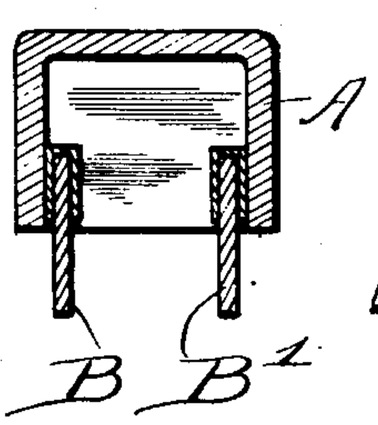


Fig. 4

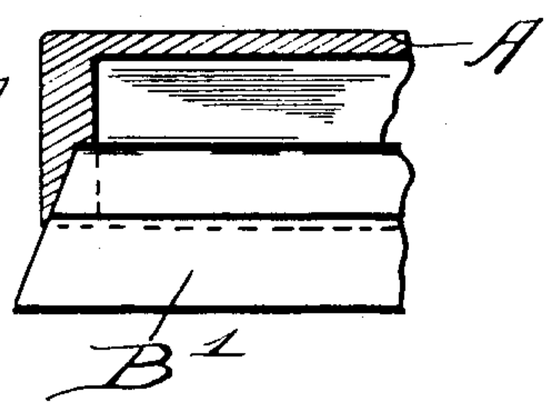
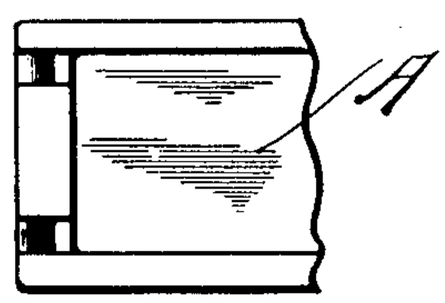


Fig. 5



Witnesses

J. St. Angell.

H. H. Withenbury

Inventors

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Charles E. Baker.

by Chas. W. Hills Atty.

UNITED STATES PATENT OFFICE.

JOHN P. RAYMOND AND CHARLES E. BAKER, OF CHICAGO, ILLINOIS, ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, TO THE VACUUM CLEANER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

SCRUBBING DEVICE.

954,541. Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed April 18, 1906. Serial No. 312,409.

To all whom it may concern:

Be it known that we, JOHN P. RAYMOND and CHARLES E. BAKER, citizens of the United States, and residents of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Scrubbing Devices; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in scrubbing devices of that class set forth in our prior application for patent filed on the 23rd day of February, 1906, Serial No. 302,416, for scrubbing mechanisms and in which a vacuum process and squeegee is employed to remove the water from the floor after scrubbing. It has been found that if a single squeegee is employed a few drops of water usually remain upon the floor after the squeegee is lifted.

The object of this invention is to afford a squeegee head adapted to insure the removal of all the water from the floor leaving the same very nearly dry and avoiding the leaving of any drops of water upon the floor at the end of each stroke of the squeegee.

The invention consists in the matters hereinafter described and more fully pointed out and defined in the appended claim.

In the drawings: Figure 1 is a perspective view of a device embodying our invention. Fig. 2 is a bottom plan view partly broken away. Fig. 3 is a transverse section. Fig. 4 is a fragmentary longitudinal section. Fig. 5 is a fragmentary bottom plan view with the squeegees removed.

As shown in said drawings: A indicates the squeegee head which is constructed of aluminum or other suitable material and is hollow. Said head is provided with a central, threaded socket *a* at its top and rear side, adapted to receive a tubular handle C through which the air is drawn through the hood. Said head is provided in its bottom or under side with a slot which extends approximately its whole length and is of any desired width. Secured on each side of said slot or in other words at the front side and the rear side thereof and affording an air space between the same is a squeegee B and B′. As shown said squeegees are each constructed with a sheet metal or other suitable back engaging over a suitable strip of rubber, or other flexible material forming the resilient portion of the squeegee. Both squeegees are held firmly in position with the flexible resilient edge extending below said head by means of a set screw or bolt *b*. As shown the lower corners of said resilient portion of the squeegee project at each end of the head beyond the slot and upper corners are seated in notches in the ends of the heads so that either can fold inwardly to practically close the slot between the same.

The operation is as follows: The handle C is connected by means of hose or other piping with a suitable exhaust pump or other means for exhausting the air therethrough (but not shown in the drawings). The floor having been scrubbed by the use of a brush or other suitable means the head of the squeegee is placed upon the floor with the flexible edges of the squeegees both bearing upon the wet surface and moved back and forward over the floor drawing the water therethrough. As the head moves over the floor the rubber strips or squeegees are bent backward. The air pressure on the outwardly turned squeegee serves to cause the same to cling more tightly to the floor serving as a valve to exclude the flow from that side of the head, while the inwardly turned squeegee resting upon the floor and immersed in the layer of water therein causes the inflowing air to be deflected downwardly directly against the floor and at the most effective angle with the water pushed along by the squeegee so that the air current is applied practically beneath the surface of the water. The water is thus sucked up from and is entirely removed from the floor. When the motion of the head is reversed, the squeegee before turned inwardly is turned outwardly and vice versa reversing the action of the respective squeegees. Thus the head being moved forwardly and backwardly upon the floor quickly collects all the water and the same is drawn through the head and delivered to any suitable place of deposit or discharge.

We claim as our invention:

A tool of the class described having a

hollow head, a tubular handle connected therewith and with exhaust apparatus, said head having a longitudinal slot in its bottom, a resilient strip secured on each side of said slot and projecting below the walls of the same and engaging notches in the ends of said head.

In testimony whereof we have hereunto subscribed our names in the presence of two subscribing witnesses.

JOHN P. RAYMOND.
CHARLES E. BAKER.

Witnesses:
W. W. WITHENBURY,
W. CHARLES SMITH.