W. H. WETMORE.

MOP WRINGER.

APPLICATION FILED MAY 18, 1908.

969,229.

Patented Sept. 6, 1910.

Fig. 2.

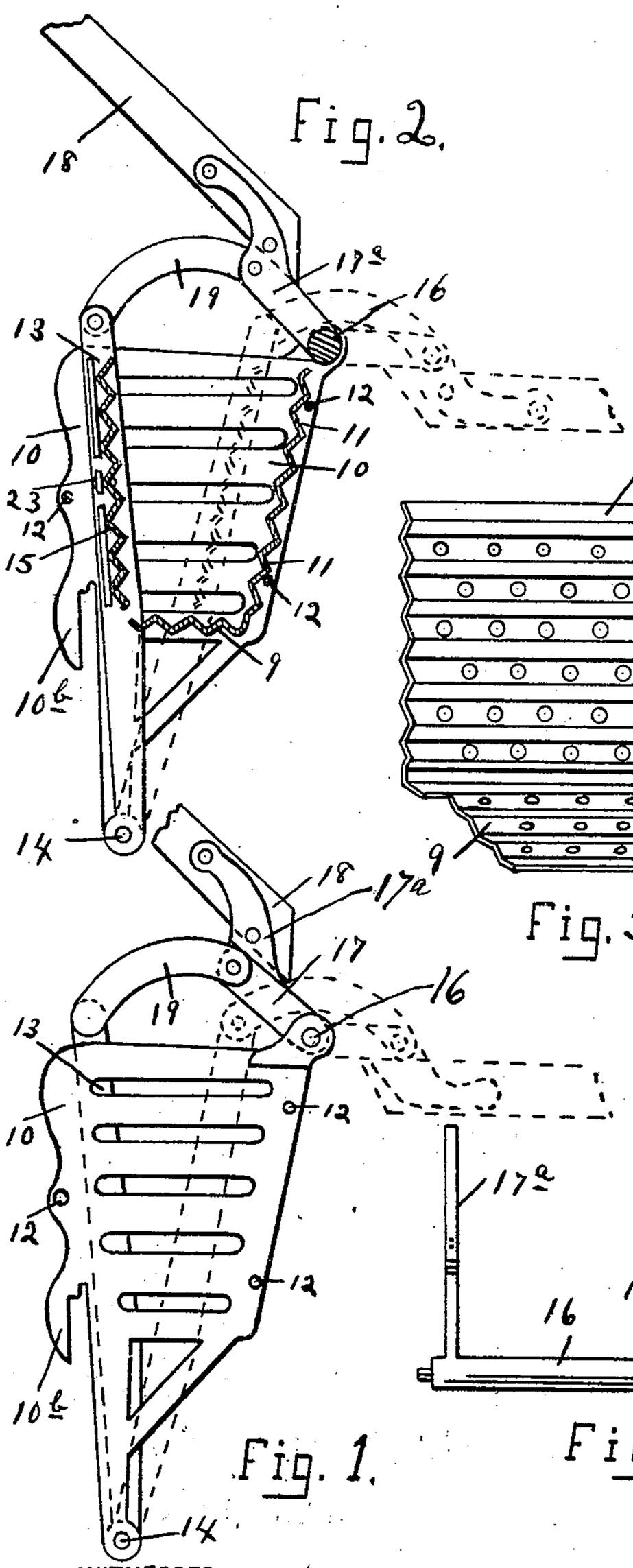

Fig. 3.

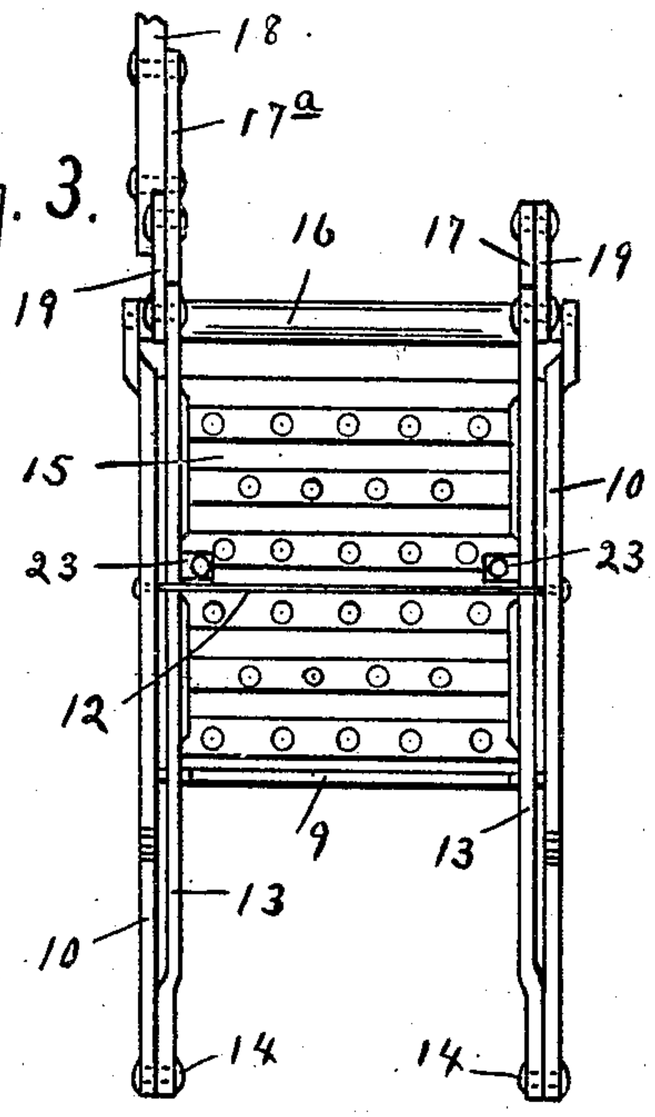

Fig. 5.

Fig. 4.

Fig. 1.

WITNESSES:

Geo. E. Rendell

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UNITED STATES PATENT OFFICE.

WILLIS H. WETMORE, OF ONEIDA, NEW YORK.

MOP-WRINGER.

969,229. Specification of Letters Patent. **Patented Sept. 6, 1910.**

Application filed May 18, 1908. Serial No. 433,409.

To all whom it may concern:

Be it known that I, WILLIS H. WETMORE, of Oneida, in the county of Madison and State of New York, have invented certain new and useful Improvements in Mop-Wringers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The object of my present invention is to provide an improved mop wringer, which is simple in construction, powerful and efficient in operation, and well adapted to successfully meet the full requirements of such a device.

Figure 1 shows an end elevation of my improved wringer in open position. Fig. 2 shows a vertical sectional view of the same also in open position. Fig. 3 is a side elevation as seen from the left as the wringer is shown in Fig. 1. Fig. 4 is a detail view of the rock-shaft and its rigid arms, and Fig. 5 is a detail perspective view of the fixed side and bottom of the wringer.

Referring to the drawings, 10 indicates the end frames which are provided with downward extensions adapted to bear against the inner side of a bucket or pail to which the wringer is applied and having hooks 10^b adapted to fit over the edge of the bucket or pail for supporting the wringer thereon. The end frames 10 are sufficiently spaced apart so as to provide for a proper arrangement of the said hooks, and adjacent to the edges overhanging the bucket or pail there is permanently secured between the end frames 10 the fixed presser side 11 which connects said frames. At its lower end the side 11 is continued in a narrow portion arranged at a suitable angle and forming a bottom 9. The said bottom 9 is formed narrower than the body 11 to afford spaces at each end of said bottom for the operating levers to swing in. The side 11 and bottom 9 are preferably formed of corrugated sheet metal as shown, and provided with numerous perforations, also substantially as shown. The said side 11 constitutes a breast against which the mop is forced and on which it is pressed in the wringing operation. The two end frames 10 may be further connected by stay bolts 12.

Arranged close to the inner sides of the frames 10, respectively, are two swinging levers 13 pivoted at 14 to the lower ends of the frame extensions, for swinging movement at their upper ends, said upper ends projecting above the tops of the frames 10. Between the upper portions of the levers 13, and forming a rigid connection between the same, is arranged the movable presser board 15. At the upper overhanging corners of the end frames 10, and substantially over the fixed presser side 11, there is mounted a rock-shaft 16 extending between the end frames and rocking in a bearing in each. This rock shaft is provided with rigid, upwardly projecting cranks 17 and 17^a, the latter extended so that the operating lever handle 18 may be secured thereto and serve for manually rocking the shaft. The swinging ends of the cranks 17 and 17^a are connected by curved links 19 with the upper ends of the levers 13, respectively, there being provided pivotal or hinged joints at each end of the links 19. The links 19 are curved in order to allow the rock shaft 16 with the cranks or crank arms 17 and 17^a to move to the position shown in dotted lines in Figs. 1 and 2 without interfering with the rock shaft or the bearings in which it is mounted.

The operation of the device is obvious but may be briefly referred to as follows: A wet mop is inserted in the wringer, when the wringer is in open position, that is to say, the position shown in full lines in Figs. 1 and 2. The operator then swings the handle 18 over from the position shown in full lines in Figs. 1 and 2 to or toward that shown in dotted lines in the same figures. This operation moves the presser board 15 toward the stationary side or breast 11, squeezing the mop. The final squeeze, which is the essential and difficult feature of this class of mop wringers, is obtained when the links 19 and the cranks or crank arms 17 and 17^a assume the position shown in dotted lines in Figs. 1 and 2, or substantially so, and in which position the curved links, extending over the rock-shaft 16, are in such a position as to exert a direct, or nearly direct pull on the swinging presser board 15. In other words, with the parts arranged as shown and with the use of the curved links 19, the leverage for the final squeeze will be such as to exert great power at the final squeeze. The wringer is oper-

ated to open position by swinging the handle 18 in the reverse direction from that above mentioned. The arrangement of the links 19 with their coöperating parts is such that they do not interfere with the mop being squeezed, and the levers are employed to the best advantage in effecting the squeezing operation.

What I claim as new and desire to secure by Letters Patent is:

1. The combination, in a mop wringer, of end frames having downward extensions to engage the inner wall of the bucket or pail and hooks to retain the device on the bucket or pail, a fixed presser side between the end frames arranged at the opposite side from the hooks which engage the pail, swinging levers hinged at their lower ends to the downward extensions of the end frames and located immediately inside the end frames respectively and projecting upwardly above the upper edges thereof, a movable presser board mounted between said levers, a rock shaft mounted in bearings in the end frames above the upper end of the fixed presser side and having rigid crank arms, curved links connecting said crank arms with the upper ends of said swinging levers, and a lever handle connected with the rock shaft, substantially as set forth.

2. The combination, in a mop wringer, of the end frames having at one side means for attachment to a pail, and downward extensions adapted to fit against the inner side of a pail, a fixed presser side arranged between the end frames at the opposite side from that having the means for attachment to the pail, said fixed side having a narrow bottom extension, swinging levers pivoted to the end frame extensions at their lower ends and projecting above the edges of the end frames and movable in the spaces afforded by said narrow bottom extension, a movable presser board secured to the upper swinging portions of said levers, a rock-shaft mounted in bearings at the upper edge of the fixed presser side and having upwardly projecting cranks, a handle for rocking the shaft, and curved draw links connecting the upper ends of the swinging levers with the rigid crank arms on the said rock-shaft, substantially as set forth.

In witness whereof, I have affixed my signature, in presence of two witnesses, this 13th day of May 1908.

WILLIS H. WETMORE.

Witnesses:
C. A. Wetmore,
Chas. F. Gaul.