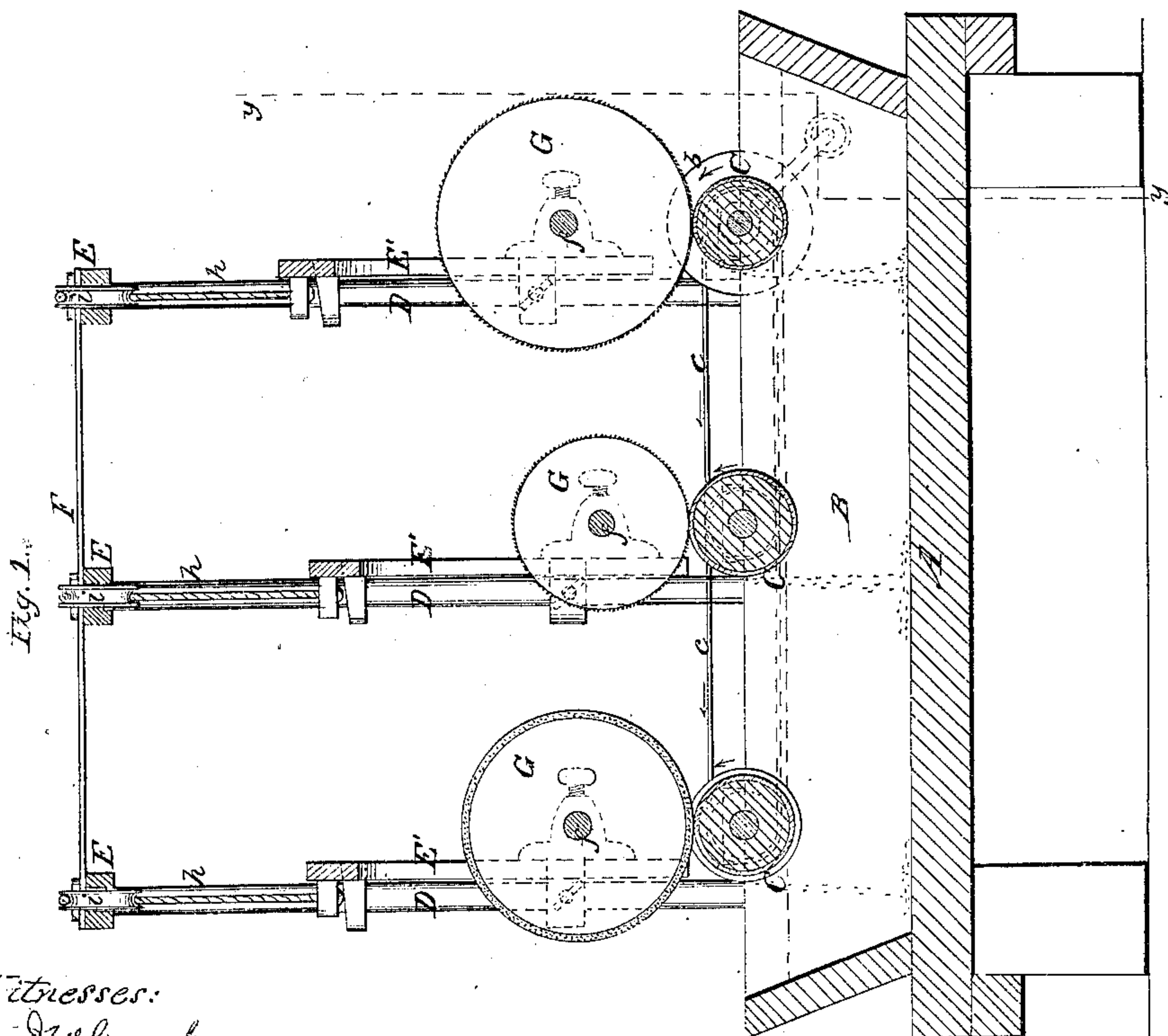
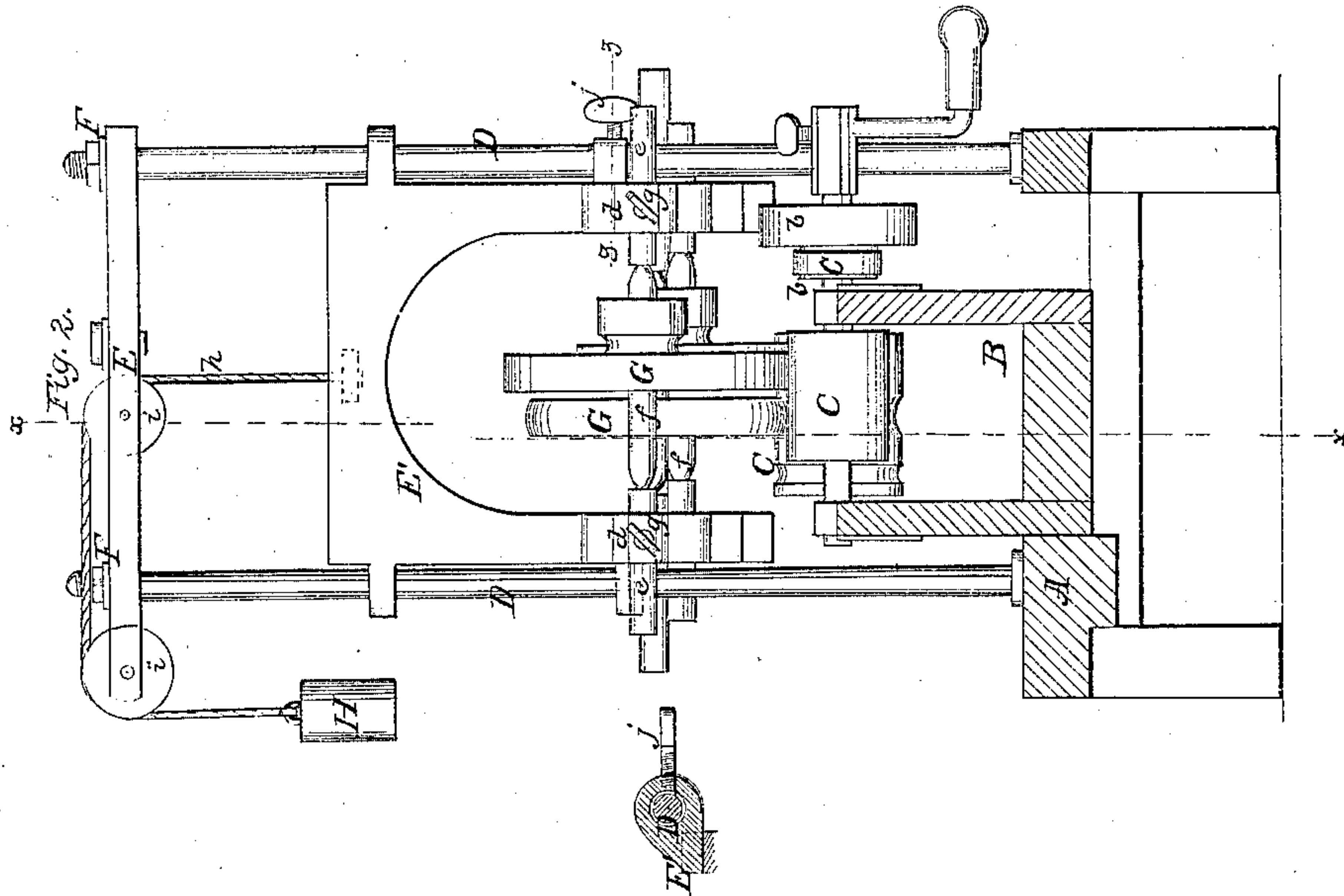


*J. Chandler,*

*Cleaning Emery Wheels.*

*N<sup>o</sup> 34,104.*

*Patented Jan. 7, 1862.*



*Witnesses:*  
*Robt. G. Ried*

*Inventor:*  
*John Chandler*  
*per Munn & Co*



# UNITED STATES PATENT OFFICE.

JOHN CHANDLER, OF COLLINSVILLE, CONNECTICUT.

## IMPROVEMENT IN MACHINERY FOR CLEANING EMERY-WHEELS.

Specification forming part of Letters Patent No. 34,104, dated January 7, 1862.

*To all whom it may concern:*

Be it known that I, JOHN CHANDLER, of Collinsville, in the county of Hartford and State of Connecticut, have invented a new and useful Machine for Cleaning Emery-Wheels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a transverse vertical section of the same, taken in the line *y y*, Fig. 1; Fig. 3, a horizontal section of a portion of the same, taken in the line *z z*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to obtain a simple machine to supersede the manual process of cleaning emery-wheels which are worn and require to be re-coated. The ordinary manual process is attended with a considerable expenditure of time and labor, and the emery which is removed from the wheels is wholly lost. By my invention, hereinafter described, the emery which is removed from the wheels is all saved and much labor avoided.

The invention consists in placing one or more sliding frames on vertical guide-rods, said frames having the wheels which are to be cleaned fitted in them and allowed to rotate freely, and using, in connection with said frames, a water box or tank, which is provided with a roller or rollers, all being arranged to operate substantially as herein-after described to effect the desired result.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a horizontal bed-piece, which may be supported at a suitable height by legs or a framing, and B is a water box or tank secured longitudinally on the bed-piece A, and extending nearly its whole length. On the upper part of the box or tank B there are placed rollers C, one or more. Three rollers are shown in Fig. 1, which are parallel with each other and are placed transversely on the box or tank B. The shafts *a* of the rollers C

have pulleys *b* on them at one end and at the outer side of the box or tank B, said pulleys having belts *c* passing around them, so that the three rollers will be rotated simultaneously by applying power to any one of them.

D represents vertical guide-rods, which are attached to the bed-piece A at each side of the box or tank B, there being as many rods D at each side of the box or tank B as there are rollers C. The rods D are connected at their upper ends by transverse bars E and longitudinal bars F.

On the rods D there are fitted frames E', which have a transverse position with the bed-piece A and box or tank B. These frames are allowed to slide freely up and down on the rods D, and to the lower part of each frame E there are secured two bearings *d d*, in which center rods *e* are placed to receive the ends of the mandrels *f* of the wheels G to be cleaned. The rods *e* are secured in their bearings *d* by set-screws *g*, and when the device is in operation the peripheries of the wheels G are in contact with the rollers C.

The frames E' are counterpoised by weights H, the cords *h* of which pass over guide-pulleys *i* in the bars E, and are attached to the centers of the frames. These weights H prevent the wheels G from resting too heavily on the rollers C, and at the same time facilitate the elevating of the frames E' to admit of the wheels G being adjusted in and removed from the frames E'. When the frames E' are thus elevated for that purpose, they are secured by set-screws *j*. (See Figs. 2 and 3.) The rollers C may be of wood covered with leather; but other materials might be used.

The operation is as follows: The box or tank B is supplied with water, either hot or cold, the water being sufficiently high to cause the lower part of the rollers C to be submerged. Any one of the rollers C is rotated by any convenient power, and the wheels G, having been adjusted properly in the frames E', rest on the rollers C and are rotated by them. The emery on the peripheries of the wheels G is thereby moistened and subjected to sufficient rubbing or friction to insure its detachment from the wheels, and the emery settles in the box or tank B. When the

wheels G are all cleaned, the frames E' are elevated and secured in such position by the screws j. The wheels G are then removed from the frames E' by sliding back one of the center rods e of each frame, and other wheels which are to be cleaned are inserted in their places.

By this invention emery-wheels may be cleaned very expeditiously and in a perfect manner and all the emery which is removed from the wheels saved for further use.

Having thus described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

The employment or use of a water box or tank B, supplied with one or more rollers C, in combination with one or more sliding frames E' for holding the wheels G to be cleaned, all being arranged substantially as and for the purpose set forth.

JOHN CHANDLER.

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