(No Model.)

H. C. STROBEL.

RUBBING, POLISHING, AND SANDPAPERING MACHINE.

No. 467,209. Patented Jan. 19, 1892.

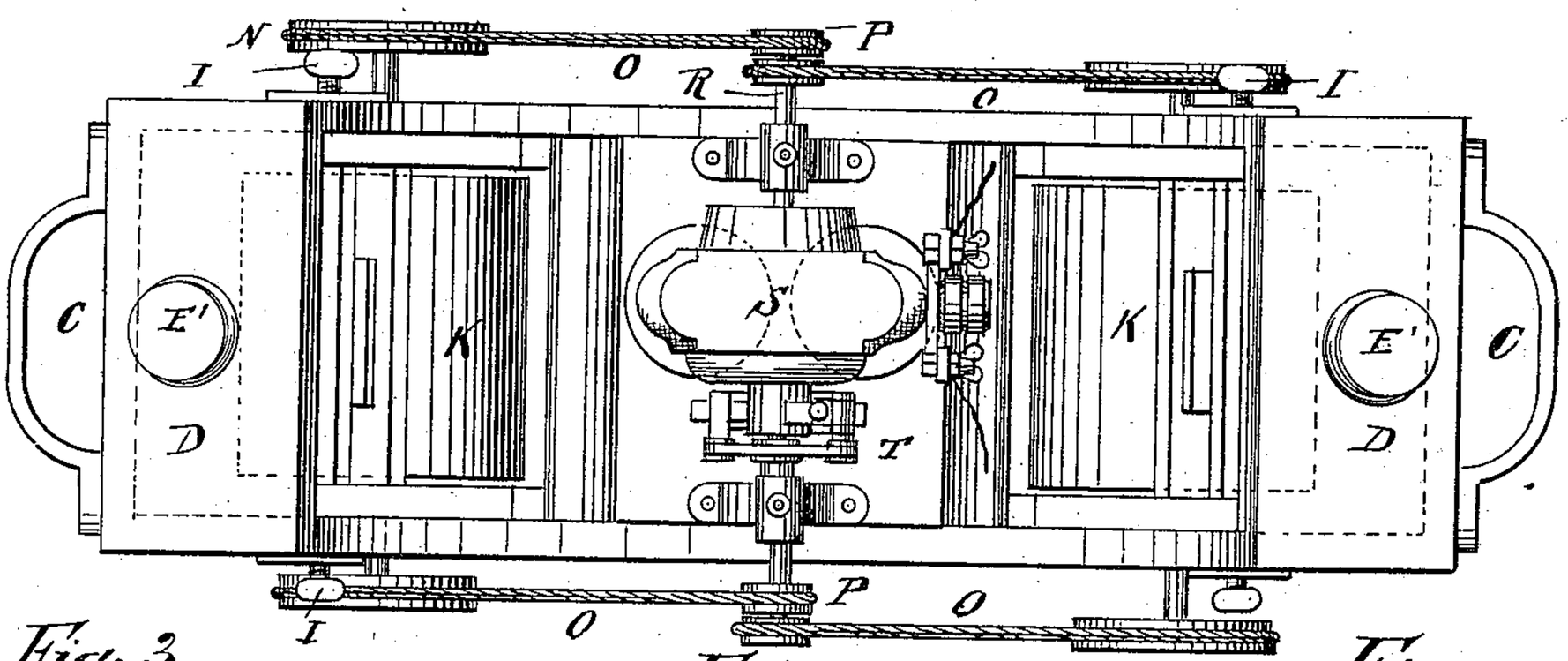

Fig: 1.

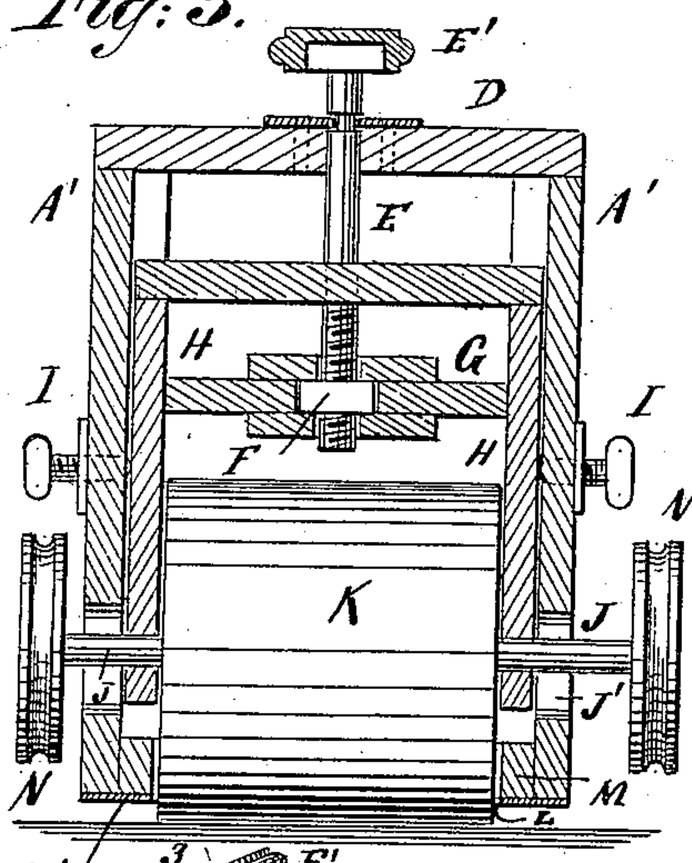

Fig: 2.

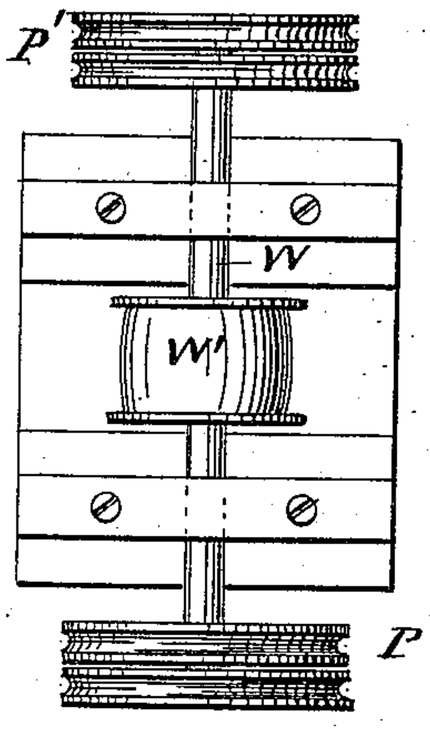

Fig: 4.

Fig: 3.

WITNESSES:

Marion Hall

Charles Schroeder

INVENTOR:

H. C. Strobel.

BY Gagel & Pregener

ATTORNEYS

UNITED STATES PATENT OFFICE.

HERMAN C. STROBEL, OF NEW YORK, N. Y.

RUBBING, POLISHING, AND SANDPAPERING MACHINE.

SPECIFICATION forming part of Letters Patent No. 467,209, dated January 19, 1892.

Application filed July 10, 1891. Serial No. 399,012. (No model.)

To all whom it may concern:

Be it known that I, HERMAN C. STROBEL, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Rubbing, Polishing, and Sandpapering Machines, of which the following is a specification.

This invention relates to that class of devices that are used for rubbing and polishing flat surfaces of wood, stone, metal, or other material.

The object of my invention is to provide an apparatus of this kind which is simple in construction, effective in use, and which can easily and rapidly be applied and used.

The invention consists in the combination, with a frame, of an abrading-roller mounted in each end of the same and adapted to be projected a greater or less distance through a slot in the bottom of the frame, pulleys on the ends of the shafts of said roller, a transverse central driven shaft on the frame, pulleys on the ends of said driven shaft, and belts passing from the pulleys on said driven shaft to the pulleys on the ends of the shafts of the roller.

The invention also consists in the construction and combination of parts and details, as will be fully described and set forth hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of my improved rubbing and polishing machine. Fig. 2 is a side view of the same, parts being in longitudinal section. Fig. 3 is a vertical transverse sectional view on the line 3 3 of Fig. 2, and Fig. 4 is a plan view of a modified construction of the driving apparatus.

Similar letters of reference indicate corresponding parts.

The frame of the apparatus is composed of the two side pieces A, united by the end pieces B, to which are attached suitable handles C for moving and shifting the apparatus while using the same. The side pieces A are each provided at each end with an upwardly-projecting part or wing A′, united at their upper ends by the cross-pieces D. In each cross-piece D a screw-spindle E, provided at its upper end with a handle E′, is mounted to rotate in such a manner that it cannot shift on its longitudinal axis. The lower screw-threaded end of each screw E passes through a nut F, held in a cross-piece G, uniting two slides H, mounted between suitable guides on the inner surfaces of the side pieces A and their wings A′. In the lower ends of the slides a shaft J is mounted, which passes through slots J′ in the side pieces A to permit said shaft J to move up and down. Between each two slides H a roller K is fixed on each shaft J, said roller being adapted to be projected through a slot L, formed in the bottom plate M, uniting the bottom edges of the side pieces A. Said rollers are provided with a covering of felt, sand-paper, cloth, or other suitable material, and the bottom plate M is provided on its under side with a covering M′ of felt, rubber, cloth, or analogous material. The side pieces A are provided with binding-screws I for locking the slides H in place after they have been adjusted. On each end of each shaft J a belt-pulley N is mounted, and from said belt-pulleys the driving-belts O O pass to and around the pulleys P P, mounted on the ends of a shaft R of an electromotor S, of any approved construction, fixed upon a base T, secured between the side pieces A and on the bottom plate M.

In place of using an electromotor a shaft W may be mounted on the block or base T, which shaft is provided with a pulley W′ for a driving-belt from any suitable countershaft, and on the ends of said shaft W the pulleys P′ are mounted, over which the driving-belts O can be passed.

To adjust the device the screws I are loosened, and by turning the handle-knobs E′ of the screw-spindles E the slides H and rollers K are adjusted higher or lower, so as to project a greater or less distance from the bottom of the apparatus. After said rollers have been adjusted they are locked in place by means of the binding-screws I, the apparatus is placed upon the surface to be polished, rubbed, or sandpapered, and the circuit of the electromotor closed, so that the pulleys N and rollers K are rotated at a high speed from said electromotor. While the rollers K are being rotated the apparatus is shifted and moved over the surface to be treated, so as to act on the surface wherever it is necessary. The apparatus operates in a similar manner

when the rollers K are operated by means of a driving-belt passed over the pulley W′ on the shaft W.

I have shown, described, and claimed in my application for United States Letters Patent, Serial No. 396,672, filed June 18, 1891, for a rubbing, polishing, and sandpapering machine the frame, abrading-rollers, and means for adjusting the rollers shown and described in this application.

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

1. The combination, with a frame, of an adjustable abrading-roller mounted at each end of the same and adapted to be projected a greater or less distance through a slot in the bottom of the frame, and an electromotor mounted on said frame for rotating said rollers, substantially as set forth.

2. The combination, with a frame, of a roller mounted in each end of the same and adapted to be projected a greater or less distance through a slot in the bottom of the frame, a driving-pulley at each end of each roller, a central transverse driven shaft on the frame, pulleys on the ends of said shaft, and belts passing from the pulleys on the ends of the driven shaft to the pulleys on the ends of the rollers, substantially as set forth.

3. The combination, with a frame provided at each end with a handle, of an abrading-roller mounted in each end of the frame, a pulley on each end of the shaft of each roller, a transverse central driven shaft on the frame, pulleys on the ends of said shaft, and belts passing from the pulleys on the ends of the driven shaft to the pulleys on the ends of the roller-shafts, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

HERMAN C. STROBEL.

Witnesses:
OSCAR F. GUNZ,
A. M. BAKER.