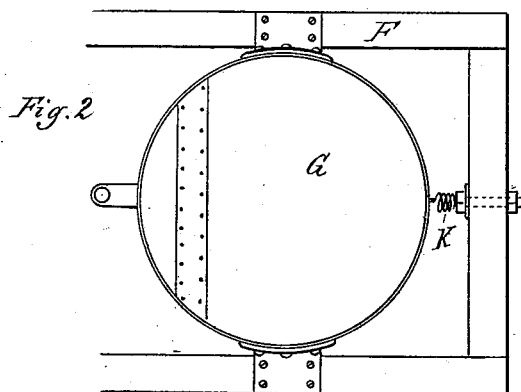
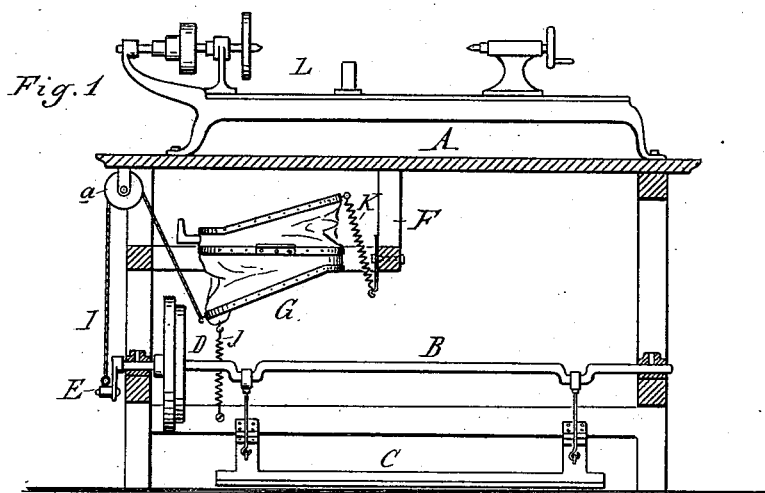


(No Model.)

M. H. KNAPP.
JEWELER'S WORK BENCH.

No. 260,880.

Patented July 11, 1882.



Attest:
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UNITED STATES PATENT OFFICE.

MILTON H. KNAPP, OF ADRIAN, MICHIGAN.

JEWELER'S WORK-BENCH.

SPECIFICATION forming part of Letters Patent No. 260,880, dated July 11, 1882.

Application filed May 14, 1881. Renewed January 14, 1882. (No model.)

To all whom it may concern:

Be it known that I, MILTON H. KNAPP, of Adrian, Lenawee county, Michigan, have invented an Improvement in Dentists' or Jewelers' Benches, of which the following is a specification.

The nature of this invention relates to certain new and useful improvements in the construction of work-benches especially designed for the use of dentists or jewelers; and the invention consists in the peculiar construction, arrangement, and combination of the various parts, all as more fully hereinafter set forth.

Figure 1 is a side elevation, partially in section. Fig. 2 is a plan, showing manner of securing the bellows.

In the accompanying drawings, A represents a suitable table or bench, in the lower portion of which is properly journaled the crank-shaft B, which is operated by means of a treadle, C.

Upon the shaft is secured the cone-pulley D, and upon one end of the shaft is secured a crank-arm, E.

Beneath the top of the bench is a frame, F, and in this frame is secured the bellows G, preferably of the form shown. One end of a cord or belt, I, is secured to the lower bellows, which passes thence up and over a pulley, a, and down to the crank-arm E, to which its opposite end is secured.

A spring, J, is secured at one end to the lower bellows, its opposite end being secured to the frame of the bench or to the floor, as described.

A similar spring, K, is connected at one end to the upper bellows, while its opposite end is secured to the frame F or any other suitable portion of the bench.

By this construction and arrangement of parts I provide a means for operating a lathe, L, upon the top of the bench, if desired, by a belt from the pulley D; but when thus used the belt I should be detached from the crank-arm E.

When it is desired to use the bellows in connection with a blow-pipe, with which it may readily be connected by any proper means, the belt I is attached to the crank-arm E, when by rotating the shaft by means of the treadle C the belt I is caused to draw up the lower bellows, which forces its air into the upper bellows, the spring J drawing the lower bellows down, and so on, alternately inflating and expelling air into the upper bellows, whence it is forced in a continuous steady blast by the action of the spring K, while the pulley D serves as a balance-wheel and insures steadiness in the action of the lower bellows.

What I claim as my invention is—

A work-bench, A, provided with a crank-shaft, B, operated by a treadle, C, in combination with the bellows G, crank-arm E, frame F, pulley a, belt I, springs J K, and pulley D, substantially as set forth.

MILTON H. KNAPP.

Witnesses:

R. B. ROBBINS,
J. C. WINNIE.