(No Model.)

H. BLUNDELL.

POLISHING HEAD.

No. 251,689. Patented Jan. 3, 1882.

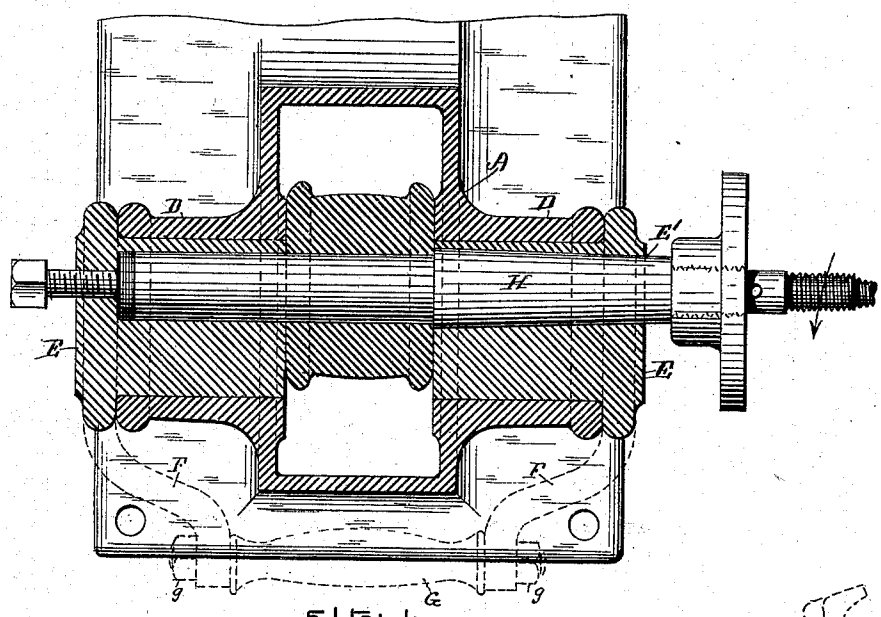


FIG. 1.

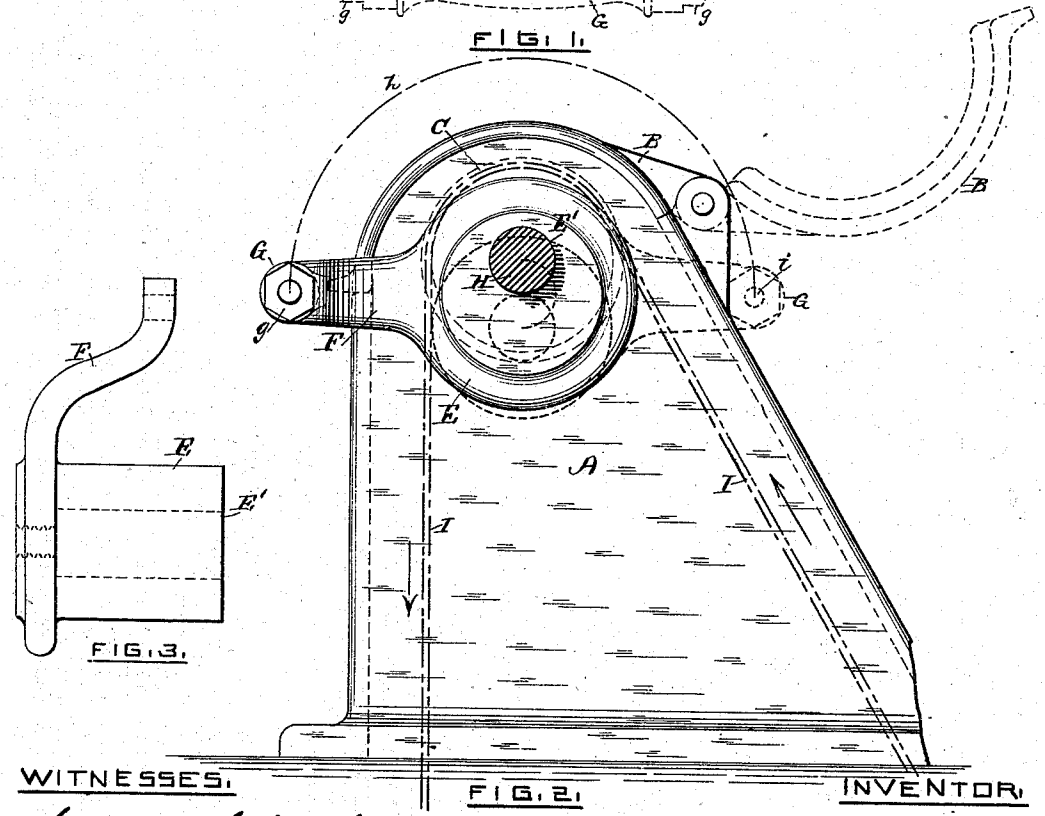


FIG. 3.

FIG. 2.

WITNESSES.

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UNITED STATES PATENT OFFICE.

HENRY BLUNDELL, OF PROVIDENCE, RHODE ISLAND.

POLISHING-HEAD.

SPECIFICATION forming part of Letters Patent No. 251,689, dated January 3, 1882.

Application filed September 12, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY BLUNDELL, of Providence, in the State of Rhode Island, have invented an Improvement in Polishing-Heads, of which the following is a specification.

My invention relates to a supporting-head with a revolving shaft, employed to polish metal ornaments and articles of jewelry and for other purposes; and it consists in supporting the revolving shaft of the head in eccentric journal boxes or bearings, whereby, by simply imparting an axial movement to the journal-bearings by means of an attached handle, the position of the revolving shaft may be varied with respect to the pulley from which the shaft of the head is driven, thus serving to tighten or loosen the driving-belt for the purpose of starting or stopping the rotation of the shaft of the head.

Figure 1 is a plan view, showing a horizontal section of the frame, journal-bearings, and pulley, taken in the plane of the axis of the shaft. Fig. 2 is a side elevation, showing the position of the journal-bearings when the shaft and pulley are at their highest elevation. Fig. 3 is a side elevation of one of the journal-bearings.

In the drawings, A is the hollow cast-iron frame of the machine, provided at its upper end with the pivoted cover B, by means of which the pulley C is made accessible. The opposite hubs, D D, of the frame A are bored out to receive the eccentric journal boxes or bearings E E, each provided at its outer end with an arm, F, the two arms F F being secured together by means of the handle G and the nuts *g g*, so that upon moving the handle G in the arc of a circle, *h*, the pulley C upon the shaft H will be raised or lowered, as desired. The hole E′ for the journal-bearing is made at one side of the center of the bearing-pieces E E, as shown in the side elevation, Fig. 2, the forward end of the shaft being represented in section, with the arm F in the position where the pulley and shaft are at their highest elevation, thus tightening the belt; but when the handle G is thrown back through the arc of the circle *h* to the point *i*, as represented by the opposite dotted lines, the shaft and pulley will be thrown to their lowest position, and the belt I will then become so much slackened that the shaft H will cease to revolve.

In Fig. 1 the shaft and pulley are represented at the intermediate position, and in this case the handle G will be in a position directly over the shaft H, and cannot be shown in the figure. The handle G and arms F are therefore represented by the dotted lines in a position corresponding to the position of the same parts as shown in Fig. 2.

I am aware that it is not new to employ an eccentric in belt-tighteners; but in my invention the single operating-shaft of the polishing-head is held in eccentric bearings rigidly connected to each other, the whole working portion of the machine being thus moved to tighten the belt, which differs materially from a belt-tightener arranged to operate between two revolving shafts held in fixed bearings.

I claim as my invention—

The combination of the frame A, pulley C, shaft H, eccentric journal-bearings E E, and connecting-handle G, substantially as described.

HENRY BLUNDELL.

Witnesses:
SOCRATES SCHOLFIELD,
D. B. POTTER.