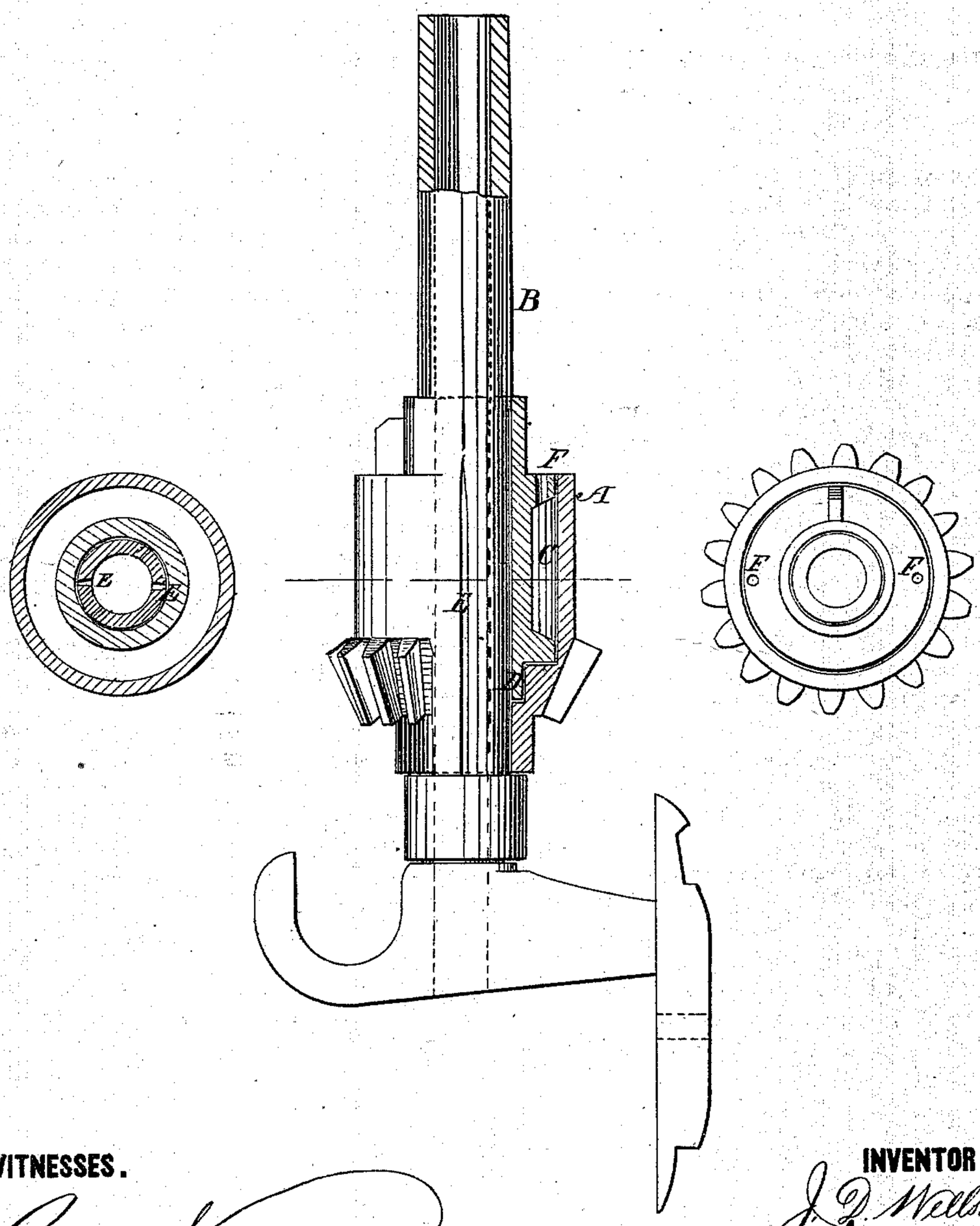
J. D. WELLS, Jr.
Self-Oiling Bolsters.

No. 146,418. Patented Jan. 13, 1874.



WITNESSES.

Chas. Nida
Sedgwick

INVENTOR.

BY J. D. Wells Jr
Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN D. WELLS, JR., OF PUTNAM, CONNECTICUT.

IMPROVEMENT IN SELF-OILING BOLSTERS.

Specification forming part of Letters Patent No. **146,418**, dated January 13, 1874; application filed November 8, 1873.

To all whom it may concern:

Be it known that I, JOHN D. WELLS, Jr., of Putnam, in the county of Windham and State of Connecticut, have invented a new and Improved Bolster and Spindle Lubricator, of which the following is a specification:

My invention consists of an oil-chamber in the hub of the gear, which runs on the bolster and revolves the bobbin, with a small passage from the bottom of it to the hole through the wheel for the bolster; also, a slot in the latter to the spindle, by which the oil-supply is carried from said chamber and delivered to the bolster only while running, and from the bolster the oil finds its way through the slot to the spindle, in a manner calculated to lubricate the parts efficiently, and at the same time economize the oil. The oil-passage from the oil-chamber to the bolster-hole of the gear prevents the waste of oil while the machine is not running, in consequence of being so small that the oil can only flow when the parts are in motion, and there is a little draft which is caused by the motions.

Figure 1 is partly a side elevation of my invention, and partly a sectional elevation. Fig. 2 is a horizontal section on the line *x x*, Fig. 1. Fig. 3 is a top view of the bolster and gear.

A is the gear for turning the bobbin. B is the bolster on which the gear A runs, and in which the spindle runs. C is the oil-chamber in the hub of the wheel; D, the oil-passage from the chamber to the hole in the gear, for the bolster. E represents slots in the bolster, to admit oil to the spindle, which works in the tubular space within it. F represents a hole for filling the oil-chamber; and G, an air or vent hole.

The chamber being filled, the oil flows through passage D, when the machine runs, and from the surface of the holes in it works through the slots E to the spindle.

This arrangement is very simple, and gives better results in economy of oil, while supplying it in sufficient quantity for practical use, than any other mode known to me, which I have determined by practical tests.

The arrangement is equally applicable to speeders, English frames, fly-frames, and roving-frames.

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

A gear-wheel having hub A, with oil-chamber C and channel-ways D F, in combination with shaft B having slots E, substantially as and for the purpose described.

JOHN D. WELLS, JR.

Witnesses:
G. W. PHILLIPS,
J. D. WELLS.