W. P. DEANE.

Shears for Cutting Paper.

No. 139,373. Patented May 27, 1873.

Fig. 1.

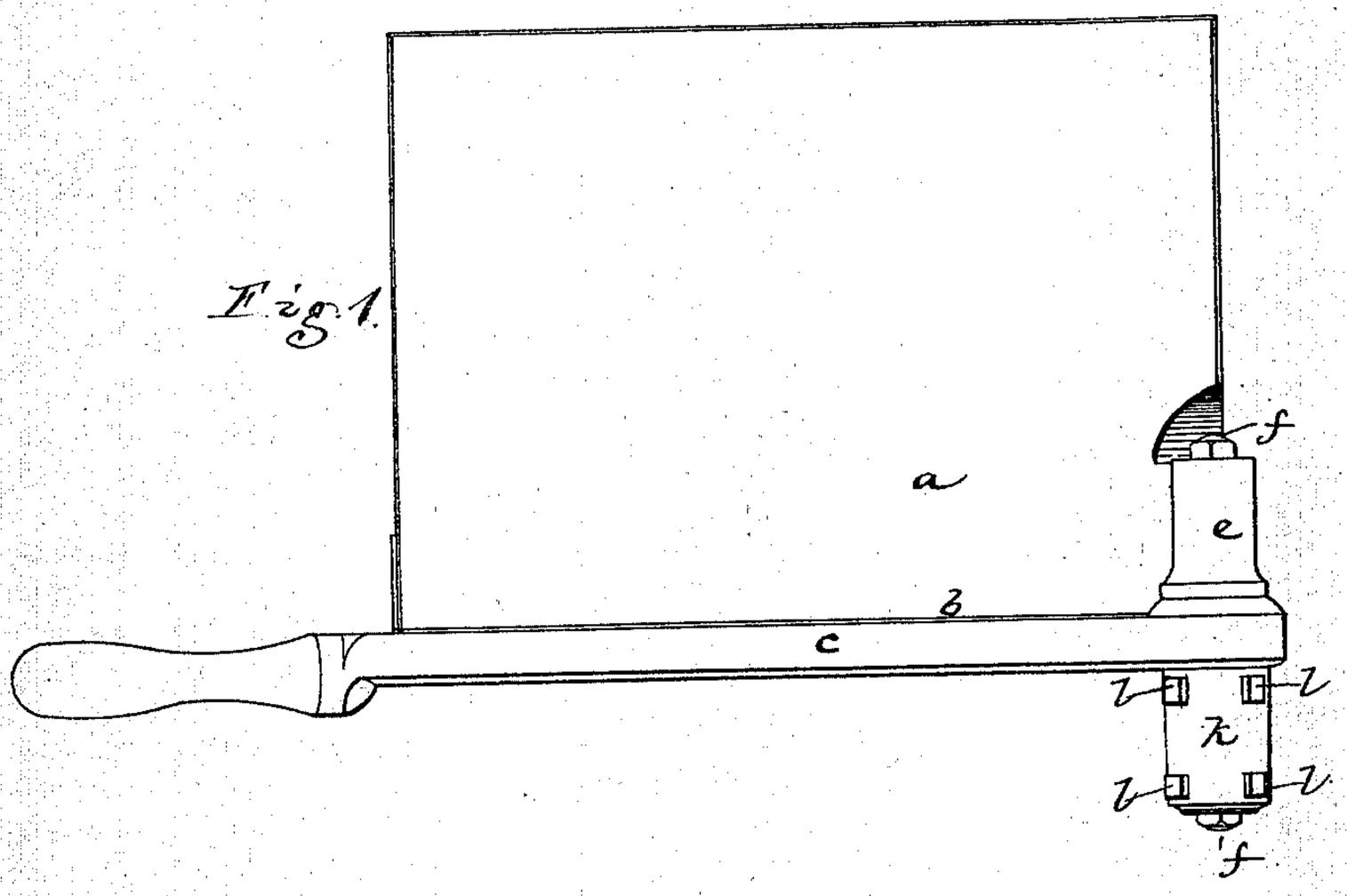


Fig. 2.

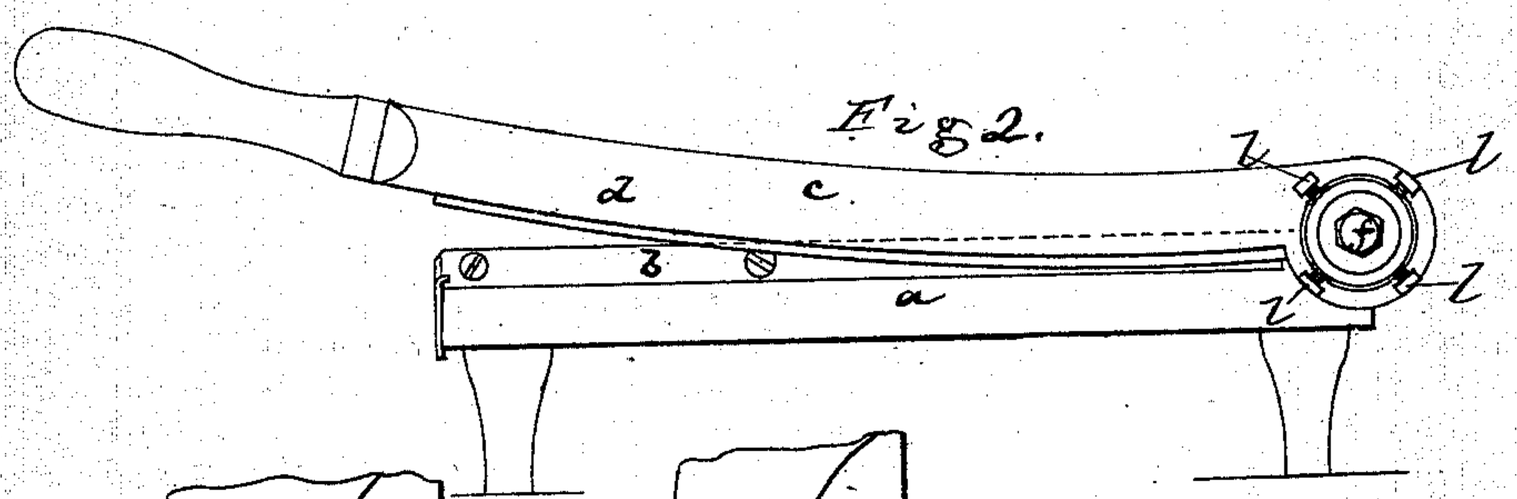


Fig. 3.

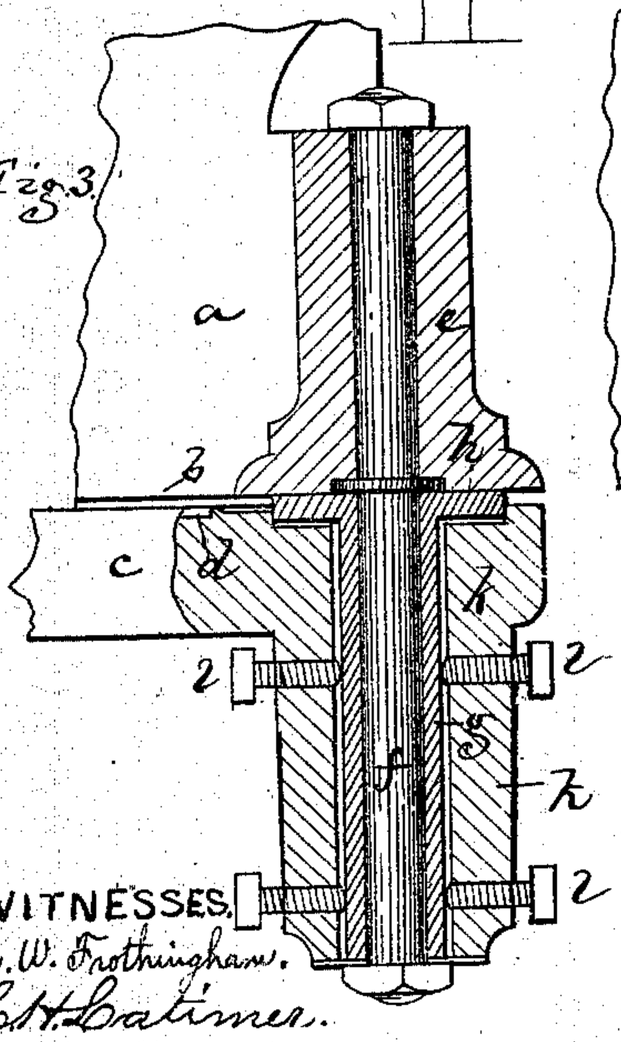


Fig. 5.

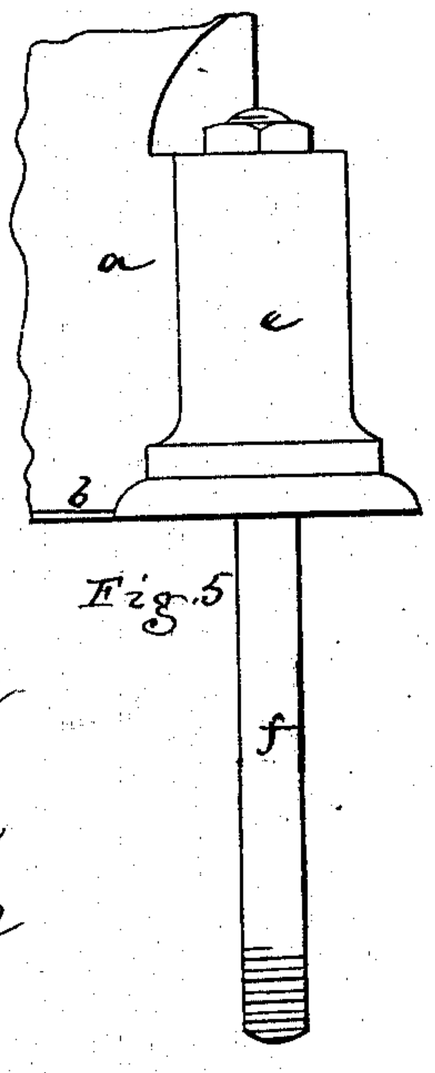
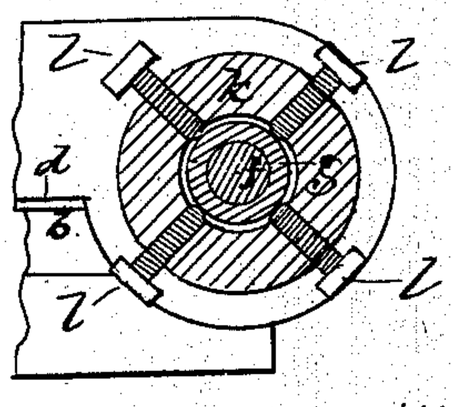


Fig. 4.



WITNESSES.
M. W. Frothingham.
L. S. Latimer.

INVENTOR.
Walter P. Deane.
By his Attys.
Crosby & Gould

UNITED STATES PATENT OFFICE.

WALTER P. DEANE, OF CANTON, MASSACHUSETTS.

IMPROVEMENT IN SHEARS FOR CUTTING PAPER.

Specification forming part of Letters Patent No. **139,373**, dated May 27, 1873; application filed March 24, 1873.

To all whom it may concern:

Be it known that I, WALTER P. DEANE, of Canton, in the county of Norfolk and State of Massachusetts, have invented an Improved Shears for Cutting Paper, &c.; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

For cutting paper and paper-board in the manufacture of paper-boxes, and in book-binding establishments, and for cutting other material, shears are in common use, in which a flat table for receiving and supporting the material to be cut, has at one edge a fixed metal plate or bed-knife, a long lever-arm pivoted at one end of the table, and having fixed to one side of it a metal blade or plate, forming the movable member of the shears.

My invention relates to this class of shears. In such machines, various means are employed for adjustment of the pivotal connections of the lever, to preserve the proper plane of movement of the shear-plate, (or to adjust it to such a plane,) and to regulate the angular position of the movable blade or plate relatively to the vertical plane of the stationary plate. My invention has reference to a construction by which I pivot the lever to a stationary stud-pin, and provide for adjustment of the pivotal arm of the lever by means of an auxiliary quill or sleeve which fits upon the stud, but upon which the tubular lever-arm fits loosely, said arm being provided with a series of radial set-screws, by means of which the angular position of the arm may be adjusted, and by loosening which, the arm, and thereby the lever, may be set up toward or away from the bed-cutter, as may be requisite. My invention consists in such construction and arrangement of the lever connections.

The drawing represents a machine embodying my invention.

Figure 1 shows the machine in plan. Fig. 2 is a side elevation of it. Fig. 3 is a section on the line *x x*. Fig. 4 shows the pivotal connection of the lever in sectional elevation.

a denotes the flat table upon which the material to be cut or trimmed is laid. *b* denotes the stationary plate or blade fixed to one edge of the table. *c* denotes the cutter-lever; *d* its blade or cutting edge. At one end of the table *a* is a bearing, *e*, in which is fixed the shank of a stud-pin, *f*, this pin extending out from the bearing, as seen at Fig. 5. Upon this pin a quill, *g*, fits and turns, this quill having a flange, *h*, fitting up to the head *i* of the bearing. Upon this quill is fastened the tubular arm or sleeve *k* of the lever *c*. The bore of the sleeve is larger than the quill, and the sleeve is fastened to the quill by set-screws *l*, passing radially through the sleeve on opposite sides and bearing at their inner ends against the quill. By loosening these screws, the sleeve *k* and lever may be moved up toward the bed-cutter, and by relative movement of them, the lever may be tipped laterally, to bring the inner or cutting-face of the cutter-plate at a proper angle in relation to the face of the stationary blade *b*, both of these adjustments being necessary to compensate for wear of the blades, and their reduction in sharpening.

It will be obvious that by these connections the requisite adjustments of the lever may be very readily and effectively made.

I claim—

The stationary stud-pin *f*, in combination with the quill *g*, and sleeve *k* and set-screws *l*, substantially as described.

W. P. DEANE.

Witnesses:

FRANCIS GOULD,
M. W. FROTHINGHAM.