

T. E. CHANDLER.
Pitmen.

No. 158,571.

Patented Jan. 12, 1875.

FIG. 2

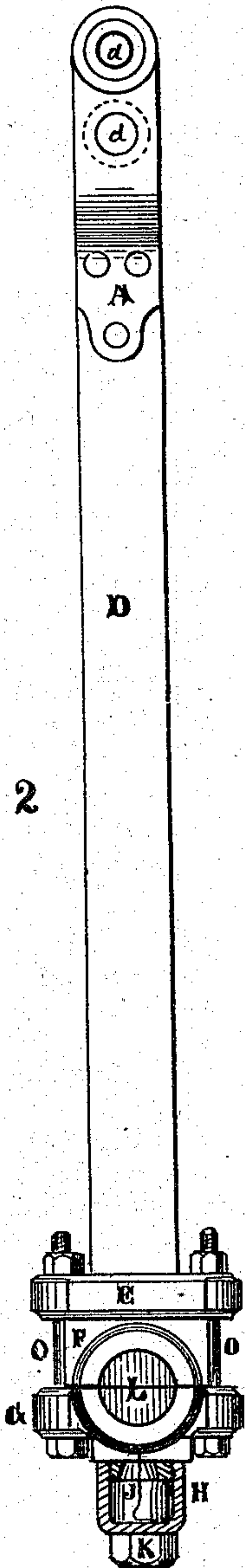


FIG. 1

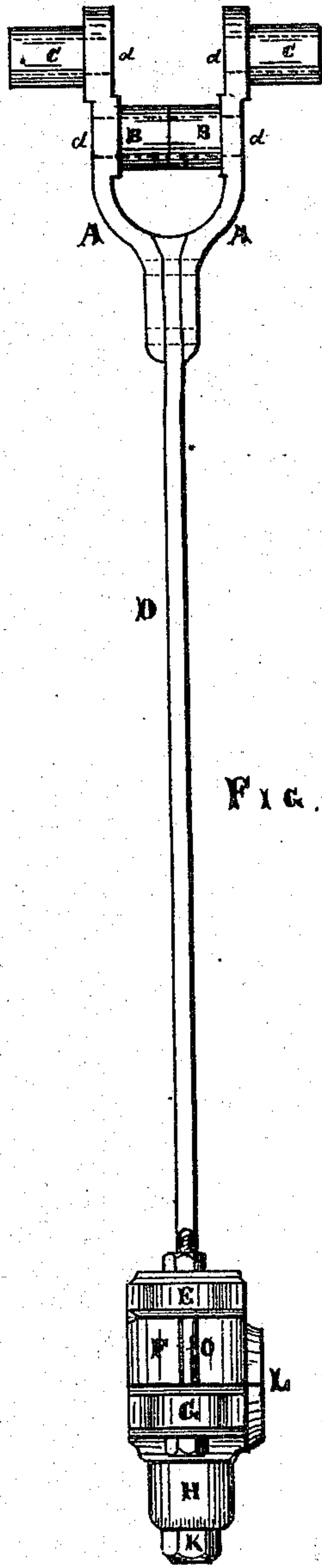


FIG. 3

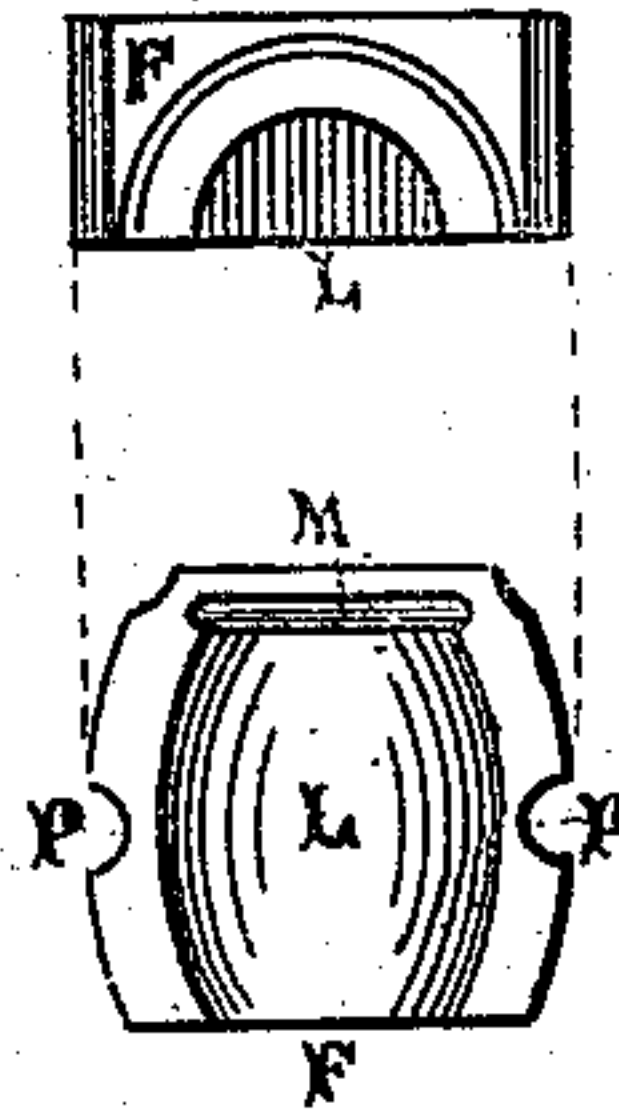


FIG. 4

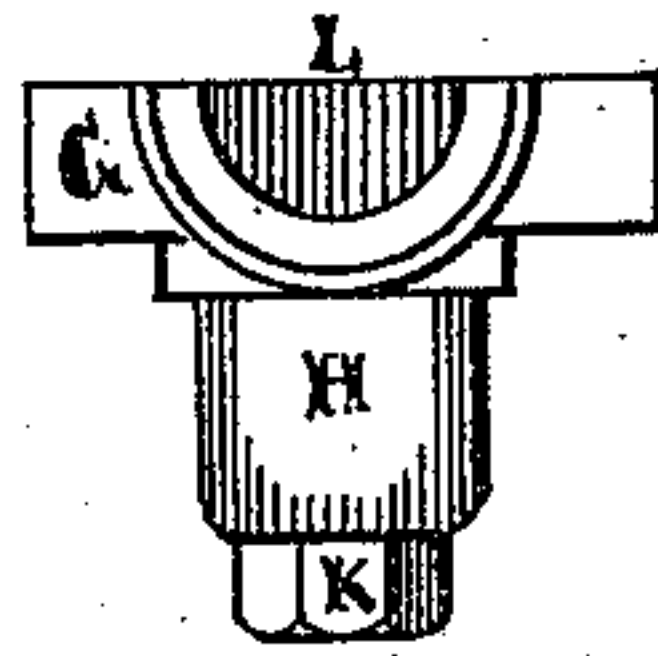
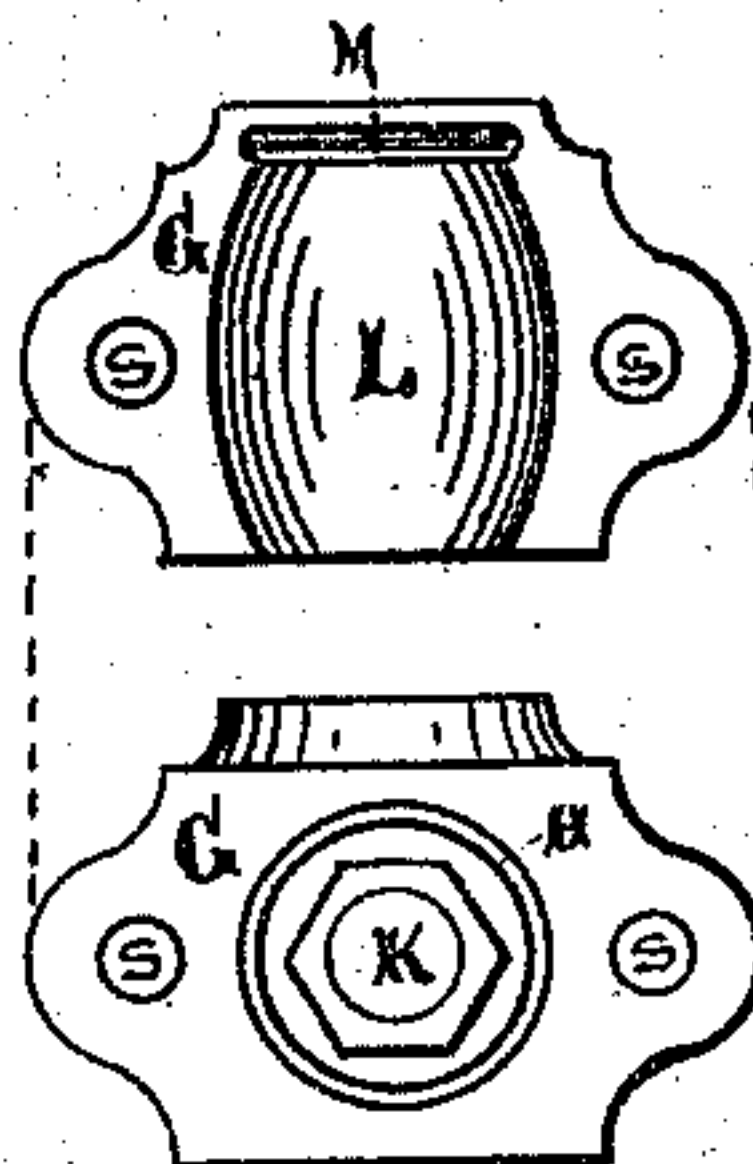


FIG. 5



WITNESSES;

Horace H. Brown
C. J. Odds

INVENTOR.

Thomas E. Chandler

UNITED STATES PATENT OFFICE.

THOMAS E. CHANDLER, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF HIS RIGHT TO FRANKLIN TAYLOR, OF SAME PLACE.

IMPROVEMENT IN PITMEN.

Specification forming part of Letters Patent No. 158,571, dated January 12, 1875; application filed October 20, 1874.

To all whom it may concern:

Be it known that I, THOMAS E. CHANDLER, of Indianapolis, Marion county, State of Indiana, have invented an Improvement in Pitmen for muley-saws and other purposes, of which the following is a specification:

The object of my invention is to construct a pitman with an elastic rod, and light and substantial sectional pieces to form the fork and wrist-pins, in connection with sectional ball-and-socket journal-boxes for the crank-pin, for the purpose of lessening the friction and resistance on the crank and wrist-pins while under reciprocating motion.

A A, Figures 1 and 2, represent two sections that form the fork of the pitman. B B and C C are wrist-pins, and are formed hollow, as represented at *d d d d*, for the purpose of decreasing the weight, and each wrist can be turned before the two sections are united to the flexible rod D, by rivets or bolts. The upper end of the rod D has an enlarged head, and the sections A A are fitted thereto for the purpose of greater strength. The rod D is formed of cast-steel, or any other suitable material, and is very thin and broad—so constructed for the purpose of elasticity, and to adapt itself to any irregularity of line between the slides and crank-pin that may occur through the settling of machinery, or otherwise. On the lower end of the rod D is cast or forged a flanged head, E, and immediately under this head the upper half of the socket-box F is placed, and under this the other half, G, of the box is secured by means of bolts O O passing through holes S in the flanges of G, Fig. 5, and through grooves P P, Fig. 3, in the side of the box F, and holes in the flanged head E, and secured by the nuts on the top of the bolts O O, as represented in Figs. 1 and 2.

The two halves of the boxes F and G are formed with a socket to fit over a ball-shaped crank-pin, and have a recess, M, at one side to hold oil, Figs. 3 and 5. These boxes are so constructed as to allow the crank-pin to work out of line in case of the settling of any part of the machinery, or otherwise; and, in connection with the elastic rod D, they will yield to any irregularity of line, without increasing the friction or strain on the boxes or rod.

At the bottom of the lower box G is secured an oil-cup, H, and the oil is fed upward to the crank-pin by a wick, I, inserted in a hole in the box G, and running down into the oil-cup H. The cup can be removed for filling by unscrewing it from the box G by means of the nut K.

The operation of my improved pitman is as follows: The two wrist-pins C and C are attached to the slides, and the wrist B B is attached to the bottom end of the saw. The boxes F and G are secured to the crank-pin, and as motion is imparted to the pitman it reciprocates up and down, and causes an oscillating motion to the lower end of the saw, and by the light and elastic construction there is an immense saving of power and friction.

I claim—

The pitman, consisting of a flexible rod, D, hollow wrist-pins C C, wrist B B, and spherical boxes B G, combined as described, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS E. CHANDLER.

Witnesses:

HORACE F. BROWN,
E. DODDS.