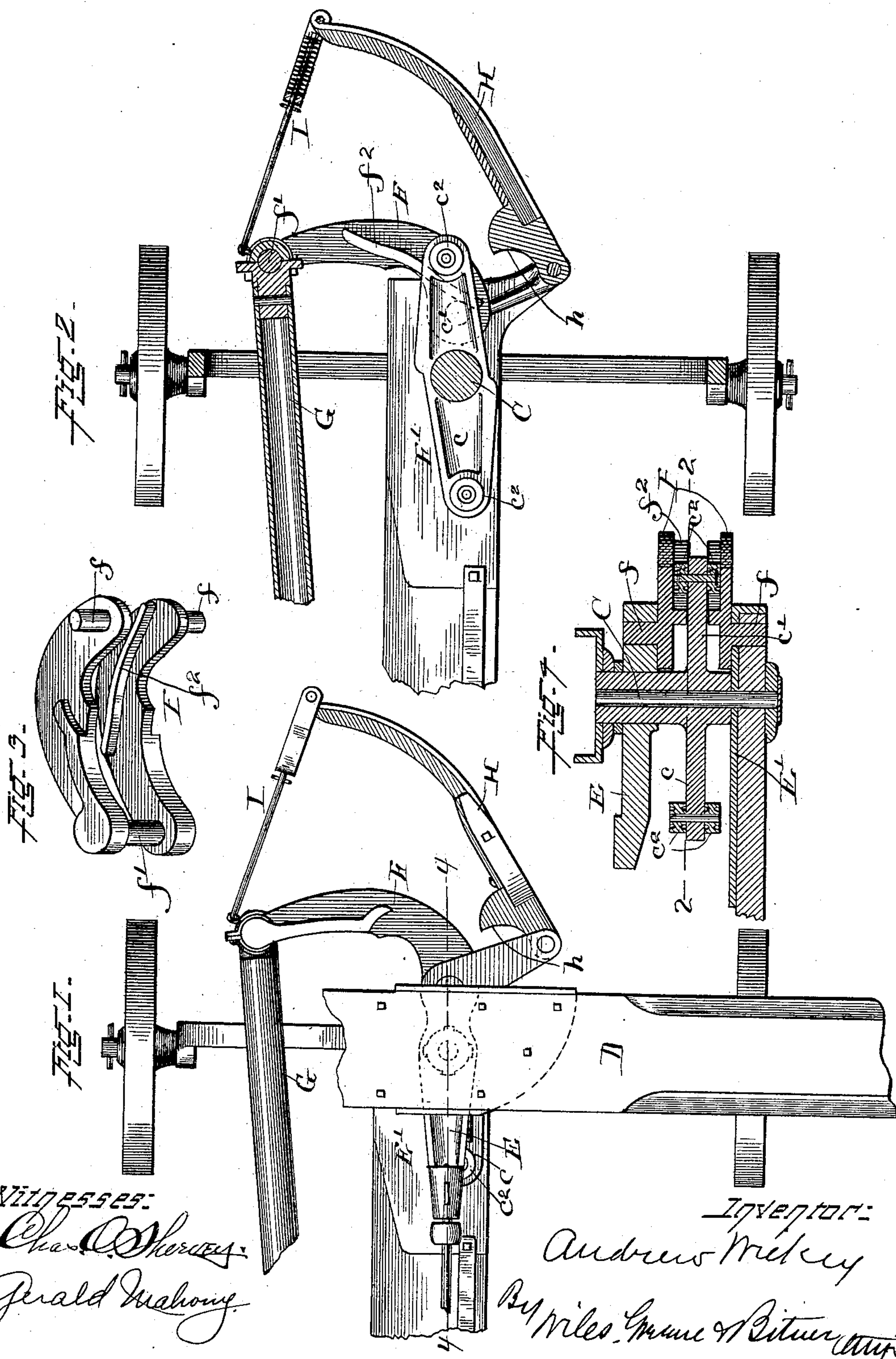


(No Model.)

A. WICKEY.
HORSE POWER.

No. 486,652.

Patented Nov. 22, 1892.



UNITED STATES PATENT OFFICE.

ANDREW WICKEY, OF CHICAGO, ILLINOIS.

HORSE-POWER.

SPECIFICATION forming part of Letters Patent No. 486,652, dated November 22, 1892.

Application filed March 16, 1892. Serial No. 425,105. (No model.)

To all whom it may concern:

Be it known that I, ANDREW WICKEY, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Horse-Powers, of which the following is a specification.

My invention relates to certain improvements in horse-powers designed especially for use in connection with baling-presses, but of course applicable to a great many other uses. The class of baling-presses to which my improvements are especially valuable are what are known as "continuous" presses, or those having perpetual bale-chambers. In these presses it is exceedingly important that the motion of the pitman and plunger be regulated, so that while the horses travel about the power at an even and constant gait the plunger shall move much more rapidly at some portions of its traverse than at others. It has been attempted to accomplish this by means of various cam movements and other devices, with more or less success; but my invention is designed to provide a strong and durable power and at the same time give an opportunity to adjust the motion of the plunger to any possible requirements.

The preferred form of my invention is shown in four figures, of which—

Figure 1 is a broken plan; Fig. 2, a horizontal section in line 2 2 of Fig. 4; Fig. 3, a detail perspective; and Fig. 4, a vertical section in line 4 4, Fig. 1.

Referring to these figures, I have mounted upon the power a revolving pin C, carrying a sweep or sweeps D at the top and journaled in plates E E', between which it carries arms c c', preferably having friction-rollers c². Also pivoted in the plates E E', but at a different point, is a yoke F, having pins f, extending into the two plates, but having no connection between the two arms of the yoke at this end. At the other end of the yoke a

pin f' connects the two arms and acts as a pivot, to which the pitman G is secured. The arms c c' are arranged to swing between the two arms or sides of the yoke, and cam-shaped ribs f² are provided upon the inner sides of the arms of the yoke, with which the rollers c² engage, and, traveling along the same, give to the yoke, and hence to the pitman, the desired motion. The making of the arm F in the shape of a yoke gives perfect freedom of movement to the arms c c' and enables said arms to bear by means of rollers upon their opposite sides squarely and evenly upon the two sides of the yoke, avoiding all twisting strain, a fact which enables the cams upon the yoke to be made of any desired shape to get the required motion.

To assist the rebound of the plunger in throwing back the different parts, an arm H is pivoted to the power at one end and connected by means of a spring-rod I to the pitman G. The arm H has cam-shaped shoulders h, arranged in such a position that the rollers c² shall strike them before reaching the ribs f². The spring-rod I avoids unnecessary jar when this engagement is first made.

I claim as new and desire to secure by Letters Patent—

The combination, in a horse-power, of a swinging arm c, connected with a sweep, a yoke-shaped oscillating arm F, pivoted to the power at a different point from that of the arm c, and a pitman pivoted to the opposite end of the arm F, said arm F having cam-shaped surfaces and the arm c having means for engaging with these cams and being arranged to swing between the two arms of the yoke, substantially as described.

ANDREW WICKEY.

Witnesses:

CHAS. O. SHERVEY,
GERALD MAHONY.