G. H. POND.

ELASTIC HANGING FOR REVOLVING HAMMERS.

No. 177,883. Patented May 23, 1876.

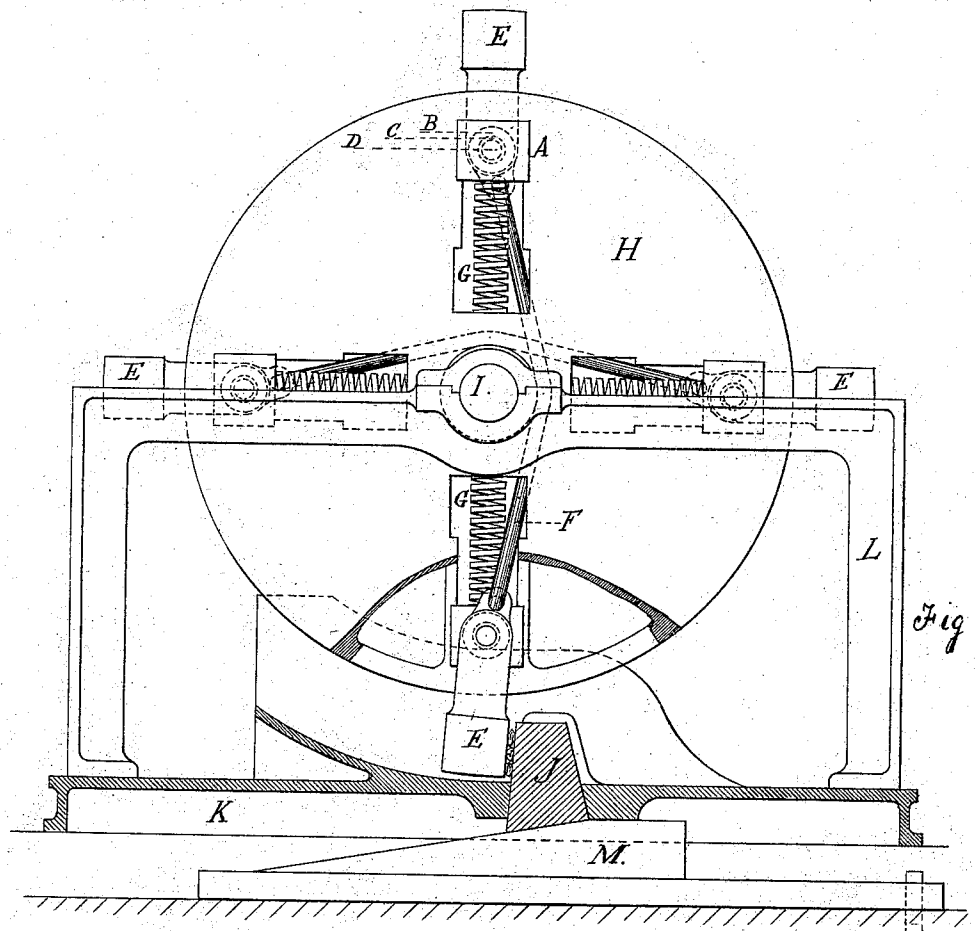

Fig 2

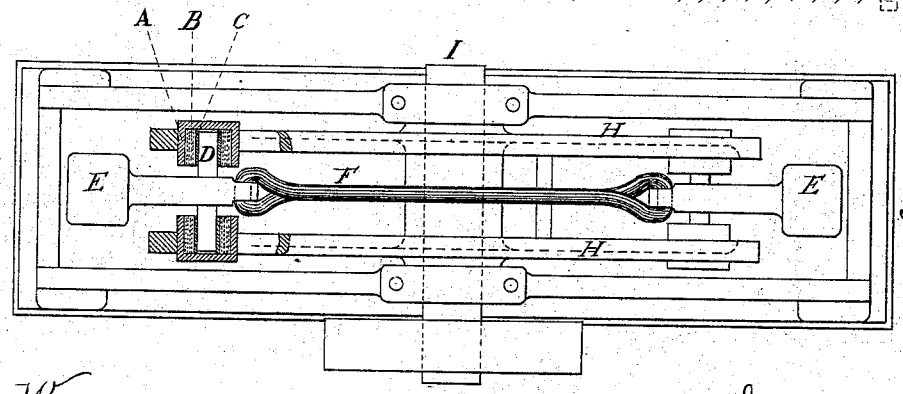

Fig 1

Witnesses.

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GOLDSBURY H. POND, OF NEW YORK, N. Y.

IMPROVEMENT IN ELASTIC HANGINGS FOR REVOLVING-HAMMERS.

Specification forming part of Letters Patent No. **177,883**, dated May 23, 1876; application filed May 11, 1876.

To all whom it may concern:

Be it known that I, GOLDSBURY H. POND, of the city and State of New York, have invented a Concentric and Elastic Hanging for Revolving Hammers, Picks, Plows, Cutters, Beaters, Thrashers, and Journals, of which the following is a specification:

The object of my invention is to provide all machines which give or receive a blow, or are liable to any jarring from the working parts, with elastic journal-boxes, and with springs to regulate the position of the working parts and keep them from breaking, by preventing the jar or the strain of the blow from reaching the main metallic parts of the machine, this being effectually accomplished by placing rubber springs around the journals, and then bracing them up and holding them to their proper places by spiral and rubber springs. Revolving hammers thus fixed are practical and economical for breaking and pulverizing ores and stone, and there is hardly a limit to the work of one of these machines when the hammers are provided with the elastic hanging. Without the elastic hanging the revolving hammers are worthless as rock-pulverizers, and have been known to break three out of the four hammer handles or shanks made out of four-inch square Norway iron, in running twenty minutes.

In the drawings, making a part of this specification, Figure 1 is a sectional view and Fig. 2 is a side and sectional view, of the revolving hammer E E. D is the pin upon which they swing. C is the metallic tube or ring on which the rubber spring B is placed, and then fitted into the box A or outer ring. The box A is then placed in position in the mortise in the disks H H, and held there by the spiral spring G. The rubber springs F F are attached to each heel or lower end of the hammer-handle, and are drawn tight enough to keep the heads of the hammers in a working position.

The hammers move round to the die J, (which is held in place by the wedge M,) strike against it, swing in toward the center and pass over it, and so on, and any ores placed before the die are crushed and pulverized, and thrown out over the end of the machine.

The revolving picks, steam cutters and plows, thrashing-machines, hemp and flax breakers, trip hammers, are all arranged in the same way as the revolving hammers, with the addition, where required, of more disks on the same shaft, and provided with the same elastic hanging, which prevents them from breaking, thereby making the revolving steam-plow a complete success, and the quickest mode of preparing the land for seeding, as well as the best and cheapest ever known; but which proved a failure for three successive years at Contra Costa, California, and the year following in the other western States, because the ground cutters or plows were iron and iron hangings and journals without elasticity.

I do not claim the revolving hammers as my invention.

What I claim as my invention is—

1. The concentric and elastic hanging for revolving hammers, picks, ground-cutters, thrashing-machines, &c., as set forth and described.

2. The rubber spring around the journal of the pin on which the hammers, picks, and cutters swing, forming a part of the journal-box, to prevent the machine from breaking by blows, jars, or concussion.

3. The spring from heel to heel of the hammer-handle or shank, across or to the center of the disks, or both combined, to keep the hammers, picks, cutters, thrashers, and beaters in a working position.

GOLDSBURY H. POND.

Witnesses:

MARY C. SAWTELLE,

H. M. POND.