

(No Model.)

D. STOUT.

DEVICE FOR RAISING BUILDINGS.

No. 306,973.

Patented Oct. 21, 1884.

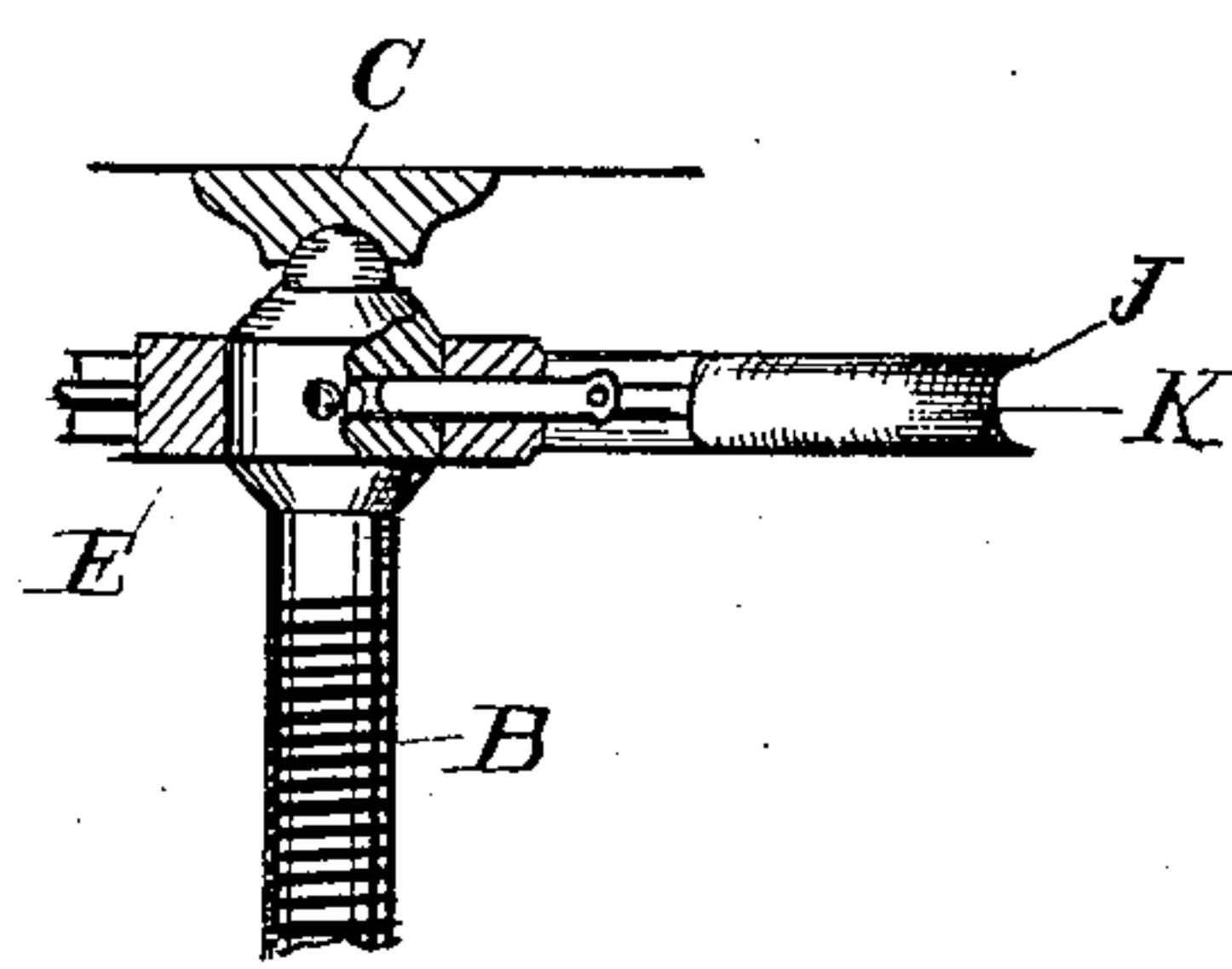


Fig. 3.

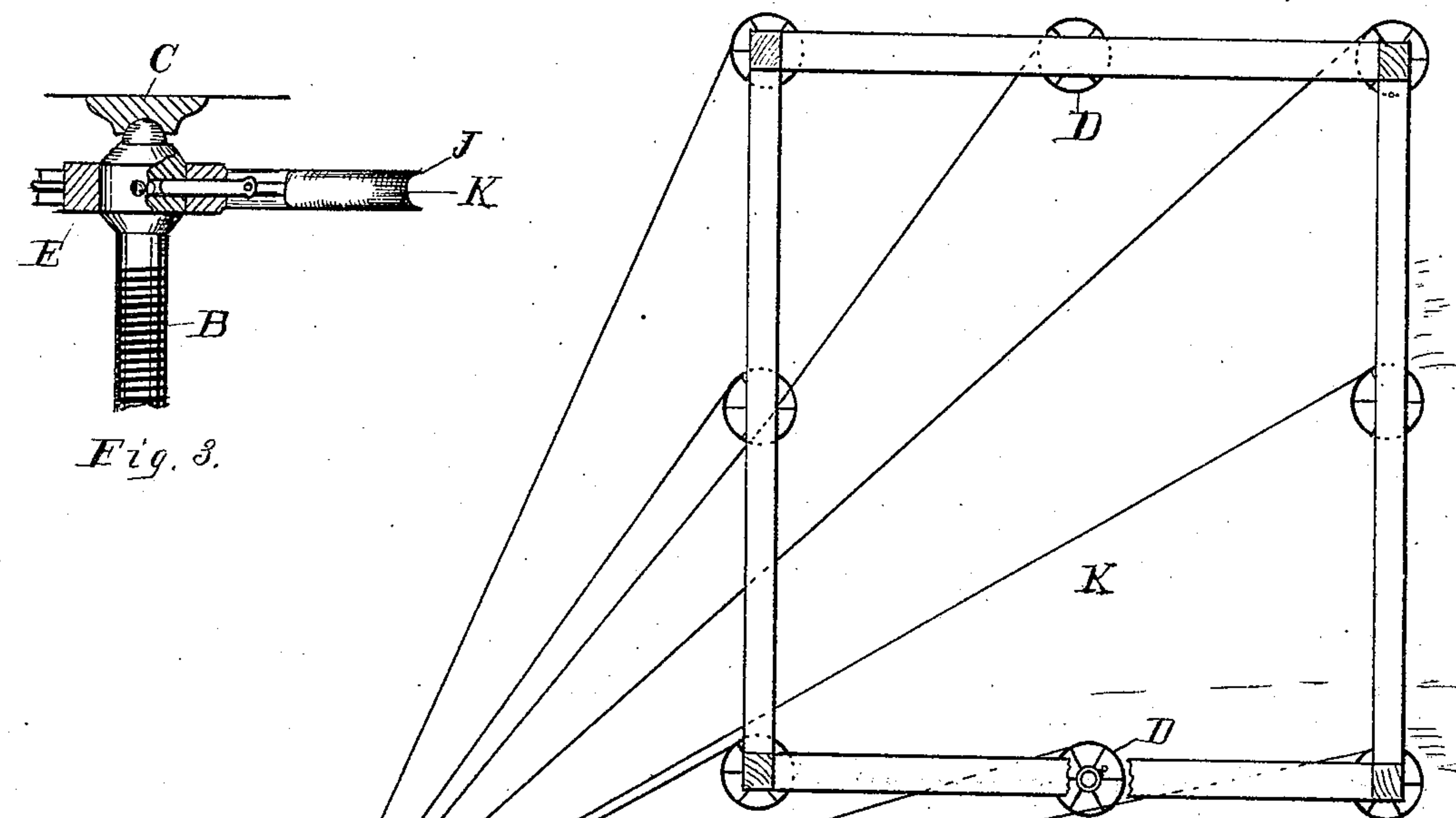


Fig. 4.

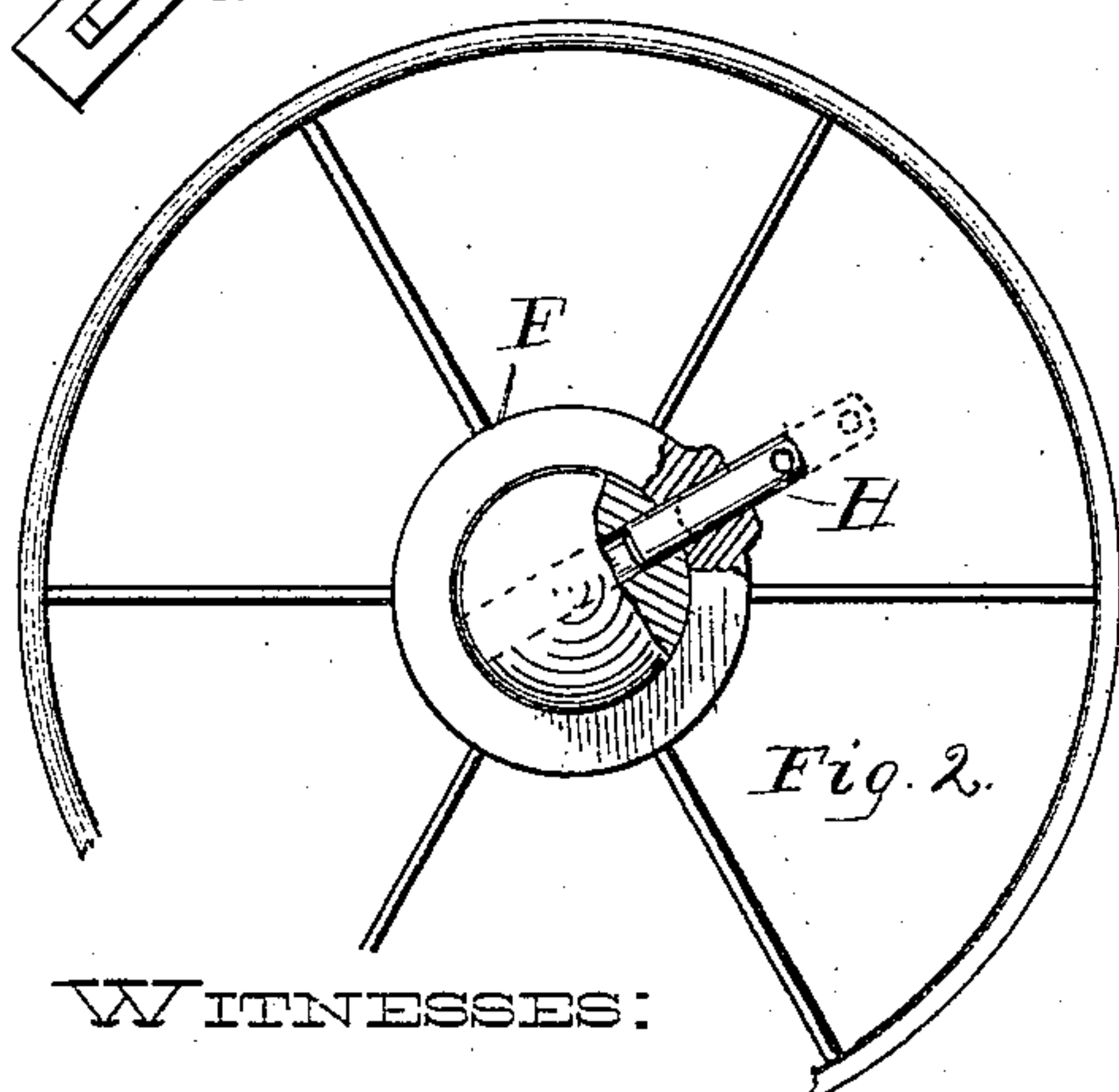
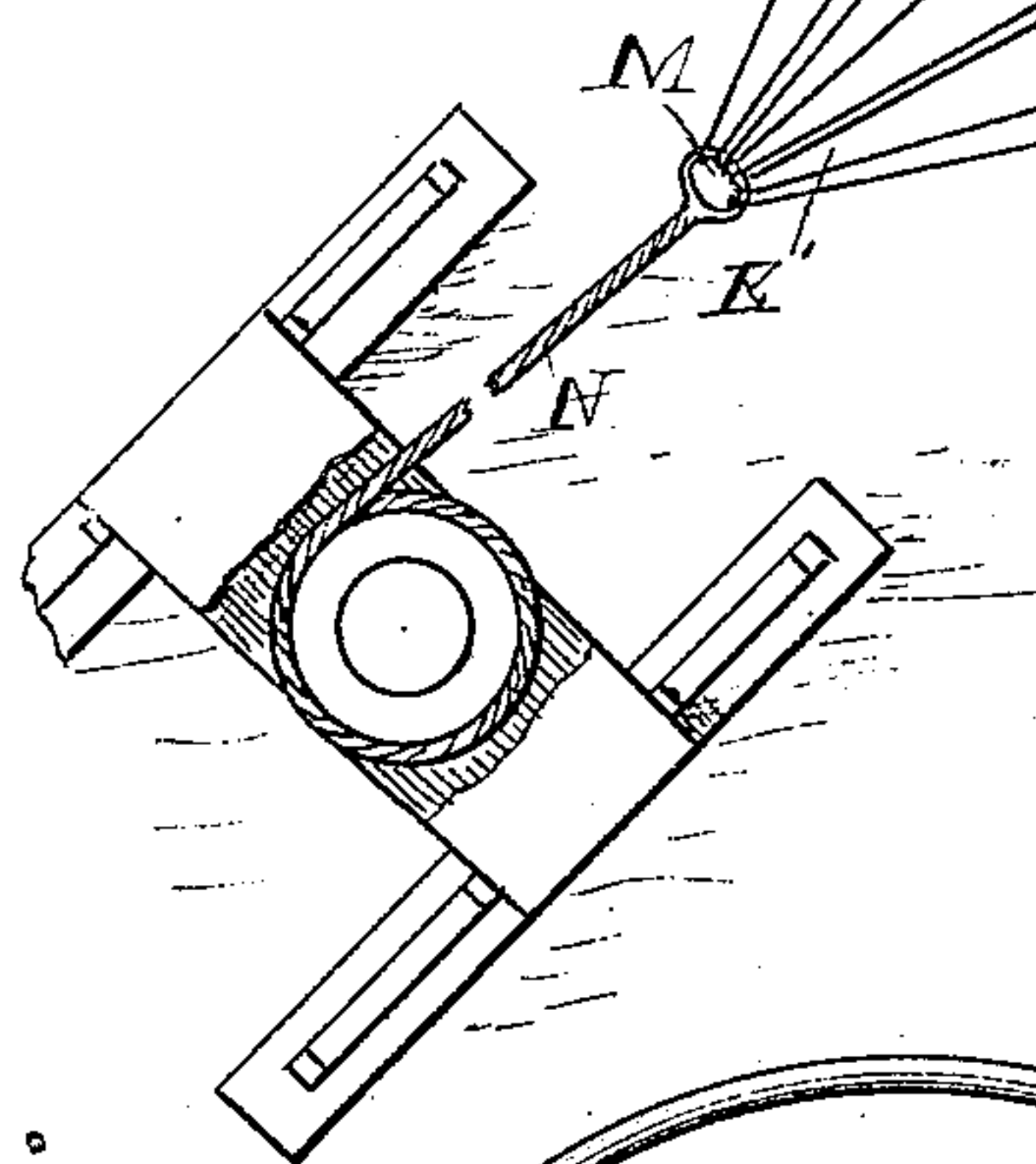


Fig. 2.

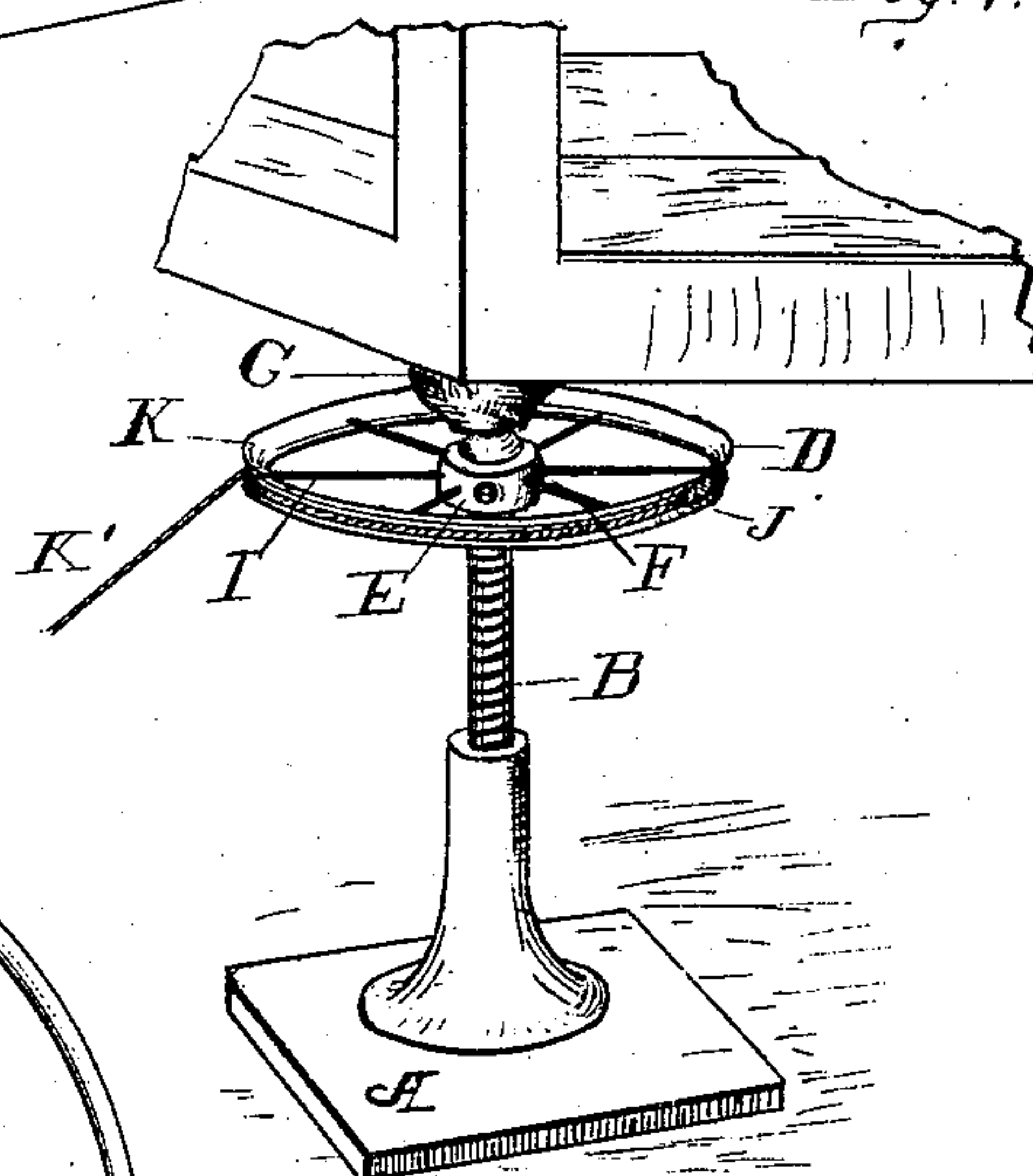


Fig. 1.

WITNESSES:

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UNITED STATES PATENT OFFICE.

DANIEL STOUT, OF WILMINGTON, OHIO.

DEVICE FOR RAISING BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 306,973, dated October 21, 1884.

Application filed March 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, DANIEL STOUT, of Wilmington, in the county of Clinton and State of Ohio, have invented a new and useful Improvement in Devices for Raising Buildings, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of a corner-section of a building with my improved lifting-jack attachment. Fig. 2 is a plan view of a pulley with set-screw or bolt for securing the same to the top end of the screw. Fig. 3 is a side view, partly in section, of the screw and pulley. Fig. 4 is a plan view of a building and capstan, showing method of connecting the ropes between the jacks and capstan.

The object of the present invention is to provide a jack-screw having at its upper end a pulley secured, around which a rope is passed a number of times, and in providing a series of jack-screws thus equipped, which are placed under the building. A rope extending from each of these jack-screws connects with a capstan, and thus the different parts of the building are raised simultaneously.

In referring to the drawings, A is the base of an ordinary jack-screw; B, the screw, and C the cap. I provide a wheel or pulley, D, having a central opening, E, of such a size as to fit over the enlarged part of the screw containing the radial openings F, which in ordinary screws are used for passing a rod through for the purpose of turning the same. An opening, G, may be made in one side of the hub, within which a bolt, H, is passed through into the radial openings in the screw for the purpose and acting as a key. Radiating outwardly from the hub are the spokes I of the number and size sufficient for the purpose. The felly J is provided on its periphery with a groove, K, of sufficient size that a rope, K', can pass a number of times around the pulley within it. The cap C is placed on the upper end of the screw, as usual. The pulley D, however, is low enough down and of such a thickness as not to interfere with the cap. When it is desired to raise a building, the screw is turned down to its lowest point in the jack. The rope is then wound around the

pulley in such a manner that when the rope is being unwound the screw will rise in the jack. A sufficient number of these jacks are then placed in position beneath the building, and the opposite ends L of the ropes from the ones secured to the pulleys extend to and are secured around the capstan.

In order that the different ropes may be of equal tension, the bolt or key within the hub is removed, when the pulley can be turned backward or forward, as may be desired, for the purpose of slacking or tightening any of the ropes.

In order that the different ropes may work smoothly on the capstan, I pass a small rope, M, around the series of ropes at a sufficient distance from the capstan not to interfere therewith, when the whole number will act together as if they were a single rope; or, preferably, I have the part N passing around the capstan formed of a separate piece of rope of sufficient size and to which the ropes are secured. By turning the capstan an equal tension is produced upon the different jack-screws beneath the building, and as a result the whole structure is raised bodily. This obviates the necessity of raising a part of the building at a time or providing a sufficient number of men to manipulate the screws where the different parts of the building are raised at the same time.

What I claim as new is—

The herein-described method of raising buildings, which consists in providing a series of jack-screws, each one of the series provided with a pulley having the hub arranged to fit around the head of the screw, and secured thereto by means of a bolt or key, the felly of the pulley grooved as described, within which is wound a rope, the opposite end of which connects with a capstan, substantially as and for the purpose herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand, this 6th day of March, 1884, in the presence of witnesses.

DANIEL STOUT.

Witnesses:

C. M. WALKER,
MELVILLE HAYES.