

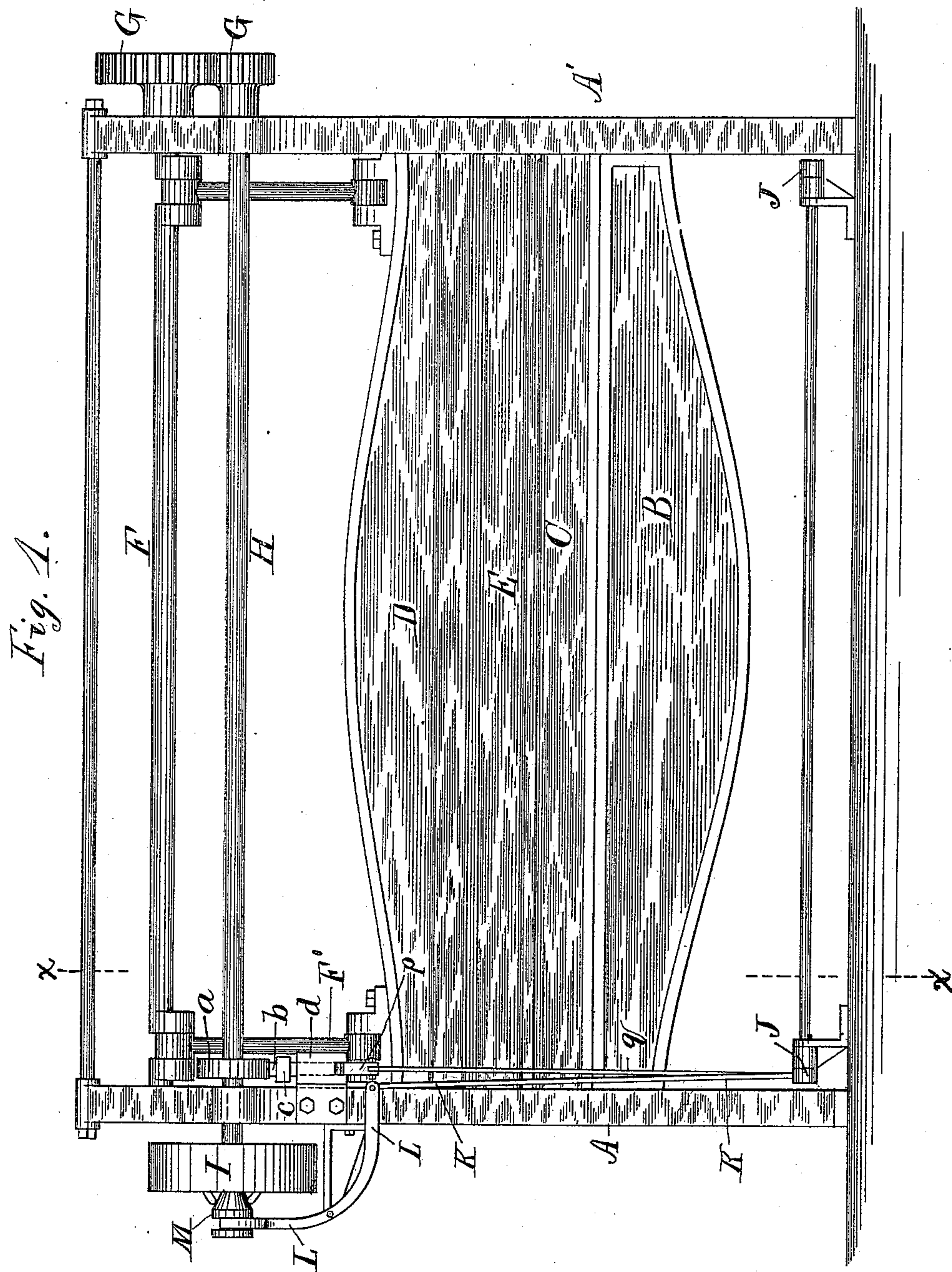
(No Model.)

2 Sheets—Sheet 1.

J. WHITE.  
BRAKE FOR CORNICE MACHINES.

No. 427,025.

Patented Apr. 29, 1890.



Attest:  
L. Lee.  
H. J. Miller

Inventor.  
James White, per  
Crane & Miller, Attys.

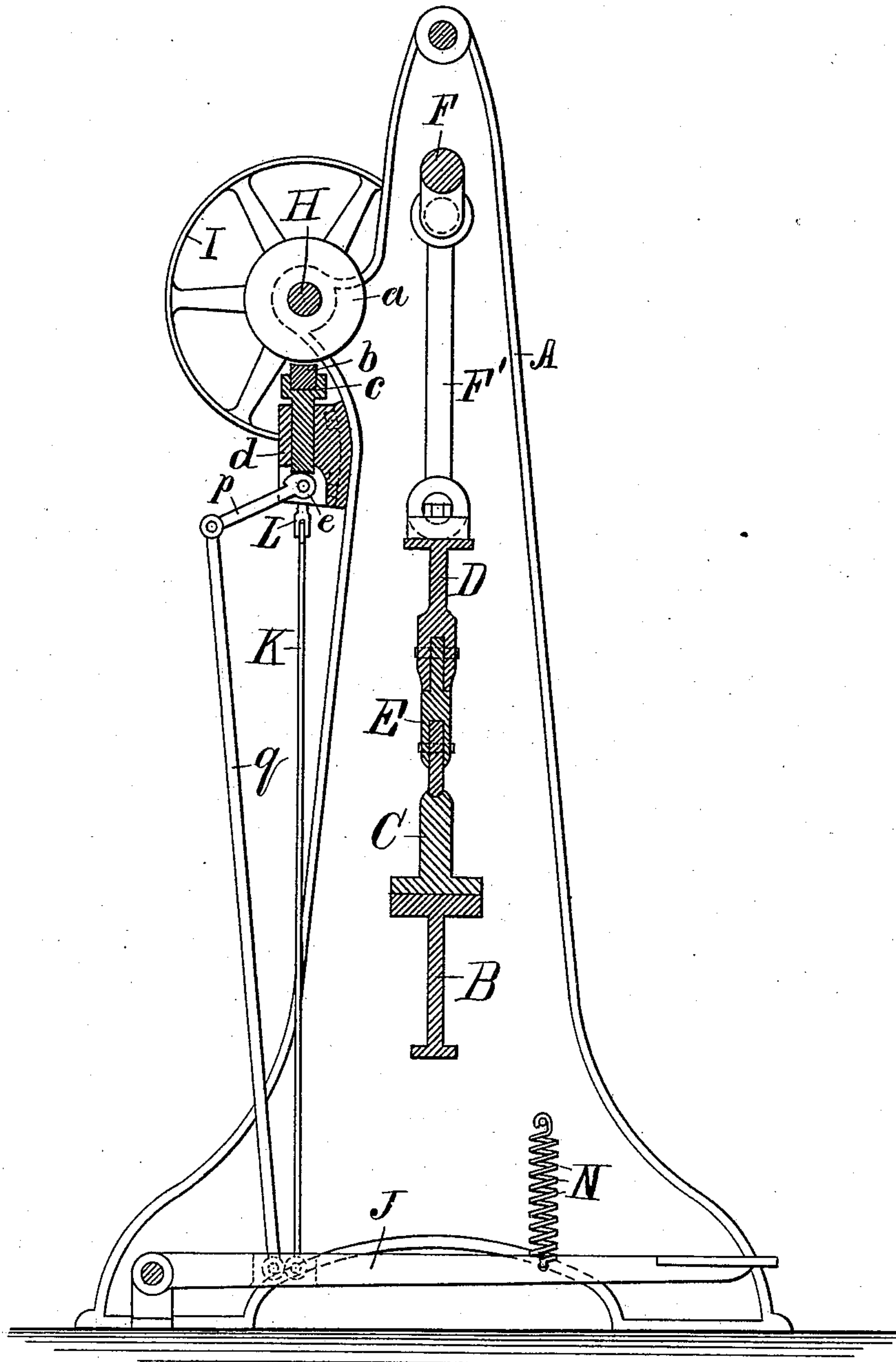
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Attest:  
L. Lee.  
F. C. Fischer.

Fig. 2.

Inventor:  
James White, per  
Charles Miller, attys.



# UNITED STATES PATENT OFFICE.

JAMES WHITE, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE VULCAN COMPANY, OF NEW YORK.

## BRAKE FOR CORNICE-MACHINES.

SPECIFICATION forming part of Letters Patent No. 427,025, dated April 29, 1890.

Application filed March 27, 1889. Serial No. 305,020. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES WHITE, a citizen of the United States, residing at Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Brakes for Cornice-Machines, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

10 This invention relates to that class of cornice-presses provided with a clutch-pulley and a treadle arranged to connect the clutch with the mechanism for reciprocating the cross-head of the press. In such presses the  
15 momentum of the driving-gearing and the weight of the cross-head cause the machine to move for some time after the clutch is disengaged from the same; and the object of the present improvement is to provide a  
20 friction-brake connected with the driving-gearing and with the treadle for actuating the clutch-pulley, so that the movement of the treadle when disengaging the clutch may throw the brake into operation and retard the  
25 movement of the machine automatically. To effect this result, the treadle, or one of the pieces connected therewith, is provided with a spring adapted to hold the clutch normally disengaged, and of sufficient power to throw  
30 the friction-brake into action, and the brake is thus operated without any attention from the operator, who merely places his foot upon the treadle when it is desired to reciprocate the cross-head, and releases the treadle from  
35 pressure when the cross-head has made the desired movements.

The invention will be understood by reference to the annexed drawings, in which—

40 Figure 1 is a rear elevation of a large cornice-press provided with the improvement; and Fig. 2 is an end elevation of one of the stanchions viewed from the inner side, with portions of the connected parts in section, on line *x x* in Fig. 1.

45 *A A'* are the stanchions, and *B* the lower cross-beam supporting the lower die *C*.

*D* is the movable cross-head carrying the upper die *E*, and *F* is the crank-shaft connected with the cross-head by links *F'* to reciprocate the same. The shaft *F* is connected  
50 by gears *G* with a pulley-shaft *H*, provided

adjacent to the stanchion *A* with a clutch-pulley *I*. A treadle *J* is pivoted upon brackets secured to the floor adjacent to the feet of the stanchions *A* and connected by a link *K* and  
55 bent lever or bell-crank *L* with the clutch-cone *M*. The depression of the treadle causes a corresponding movement of the lower end of the bent lever *L* by means of the link *K*, and thereby operates to force the cone toward the  
60 clutch-pulley *I* and to clutch the pulley to the shaft, as is common with clutch-pulleys operated by levers, thus setting the cross-head *D* in motion. The removal of the operator's foot from the treadle permits a spring  
65 *N*, attached to the treadle and to the stanchion, to lift the treadle and retract the cone from the pulley, thus disengaging the pulley from the shaft, after which the pulley will continue to rotate by means of a belt applied  
70 thereon, without driving the shaft.

To prevent the continued rotation of the shaft when the clutch is thus disengaged, a brake wheel or disk *a* is attached to the shaft near the stanchion *A*, and a wooden block *b* is  
75 held adjacent to the rim of the disk in a movable carrier *c*, operated by mechanism connected with the treadle *J*, so as to press upon the disk when the brake is actuated by the spring. The carrier *c* is formed as a square  
80 bar fitted in a socket *d*, having a cam *e* pivoted beneath it and provided with a lever-arm *p*, which is linked to the treadle by a rod *q*. The cam is so shaped that the movement of the rod when the treadle is actuated by  
85 the spring rotates the highest part of the cam toward the carrier *c* and presses the block *b* upon the friction-disk. The cam obviously transmits the motion of the treadle to the  
90 block *b* with great force; but it is obviously immaterial how the friction-block be connected with the treadle, provided the movement of the treadle serves to press the block upon the friction-disk when the clutch-pulley is disengaged from the pulley-shaft. 95

By this invention the weight of the cross-head is prevented from rotating the crank-shaft *F* when the cross-head is lifted and the weight is suspended from the crank-shaft in its highest position.

By the application of the friction-disk to the pulley-shaft *H*, which is the most quickly  
100

rotating shaft upon the machine, the motion  
of the machine is arrested in the most effect-  
ive manner and in the shortest possible time,  
as a little movement of the pulley-shaft pro-  
5 duces but a very slight rotation of the crank-  
shaft or movement of the cross-head. The  
block *b* operates as a brake upon the disk *a*,  
and it is immaterial whether such block be  
used or some other form of brake be pressed  
10 upon the disk to arrest its movement. It will  
be understood that the disk *a* may be made  
of wood, metal, or any other desirable ma-  
terial, and may consist in an iron pulley, the  
same as a belt-pulley, instead of a solid disk,  
15 as shown herein.

Having thus set forth the nature and ad-  
vantages of this invention, what is claimed is—

The combination, with the pulley-shaft and  
clutch-pulley, of a treadle to actuate the  
clutch, a spring to hold the clutch normally 20  
disengaged, a friction-wheel upon the pulley-  
shaft, the carrier *c*, mounted movably in the  
socket *d* and holding the brake-block *b* adja-  
cent to the friction-wheel, and the cam *e* and  
lever *p*, connected with the treadle by the rod 25  
*q* and operated as shown and described.

In testimony whereof I have hereunto set my  
hand in the presence of two subscribing wit-  
nesses.

JAMES WHITE.

Witnesses:

ANSON O. KITTREDGE,  
RICHARD J. SLANDORFF.