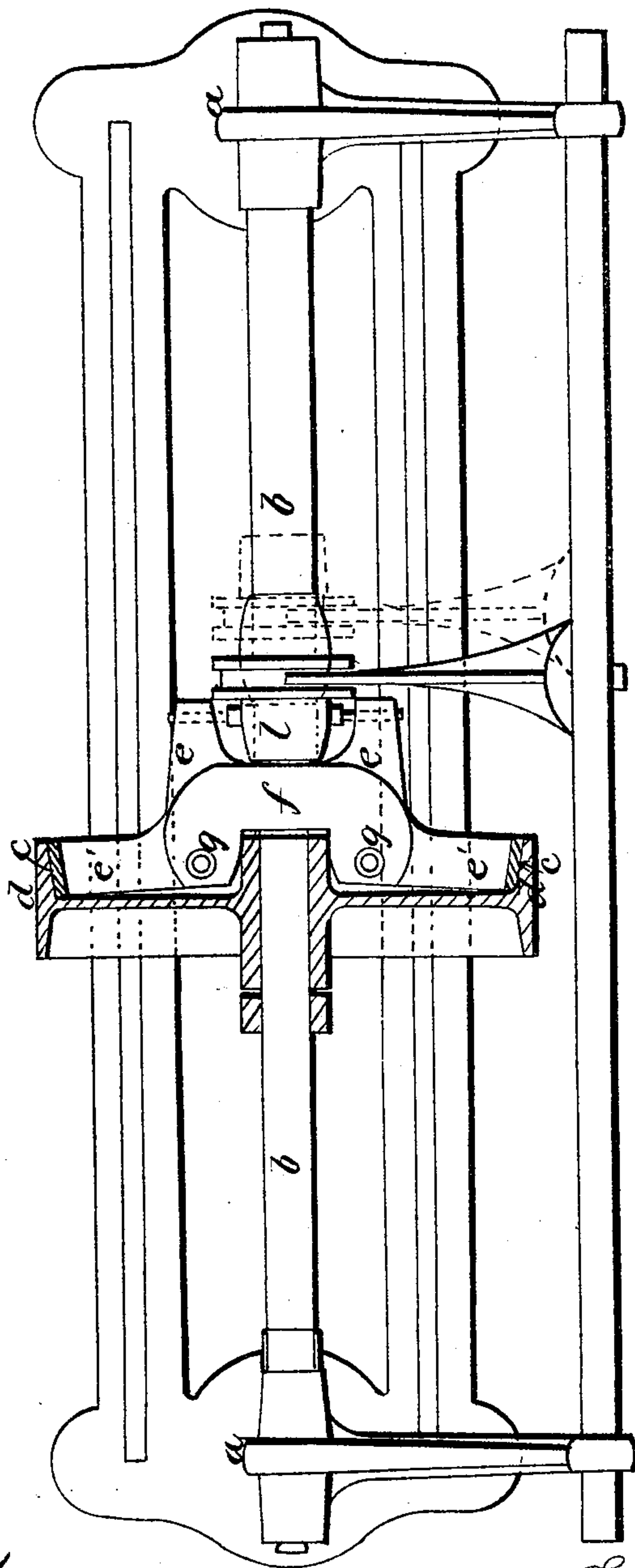


F. A. Pratt,
Friction Clutch.
N^o 33,816. Patented Nov. 26, 1861.



Witnesses,

Thomas Thompson
Jeremy W. B. B.

Inventor,

Francis A. Pratt

UNITED STATES PATENT OFFICE.

FRANCIS A. PRATT, OF HARTFORD, CONNECTICUT, ASSIGNOR TO GEO. S. LINCOLN & CO., OF SAME PLACE.

IMPROVEMENT IN STOPPING AND CHANGING MOTION.

Specification forming part of Letters Patent No. 33,816, dated November 26, 1861.

To all whom it may concern:

Be it known that I, FRANCIS A. PRATT, of Hartford, county of Hartford, and State of Connecticut, have invented certain new and useful additional Improvements in Devices for Stopping and Changing Motion, as patented to me September 4, 1860; and I do hereby declare that the same is described and represented in the following specification and drawings.

To enable others skilled in the art to make and use the said improvement, I will proceed to describe its construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this improvement consists in forming and substituting (for the levers or clamps *e*) angular-shaped lever-clamps *e*, having arms projecting from their fulcrum-pins *g* nearly at a right angle with the shaft *b* or wedge-collar *l*, on which they are arranged, and the outer ends of which grapple (by their friction) with or relax their hold upon the inner surface of the pulley's rim, (instead of upon a disk or collar *y*,) and the object desired to be attained thereby is to simplify, cheapen, and produce the friction at the exact point of resistance.

In the accompanying drawings, *a* are the hangers, which support and hold the counter-shaft *b* in its proper place.

d is a loose pulley that receives its impetus (by means of a belt) from the line or main shaft.

f is a collar secured to the shaft *b* by set-screws, keys, &c., and the clamp-levers *e* are secured thereto by fulcrum-pins *g* and oscillate freely thereon.

e e' are the angular levers or clamps, differing from the original in this respect, that the clamp ends *e'* project outward from their fulcrum-pins *g* nearly at a right angle with the shaft *b* or collar *f*, on which they are secured in place, and their length being regulated (long or short) according to the inside diameter of the pulley's rim. Said rim at the point where the end of the lever takes its bearing (see *c*) is made slightly inclined or wedging, and the ends *e'* are made of corresponding shape, and they may be provided with other than metallic material to take the friction of the pulley-rim at *c*, if it should be found desirable.

The other particulars as to its construction and operation, &c., are essentially the same as described in the original patent or specification.

What I claim, therefore, and desire to secure by Letters Patent, is—

Adapting the action of the levers *e e'* to the rim of a pulley *d*, in combination with the wedge-collar *l*, substantially in the manner as and for the purpose described.

Hartford, October 11, 1861.

FRANCIS A. PRATT. [L. s.]

Witnesses:

THOMAS THOMPSON,
JEREMY W. BLISS.