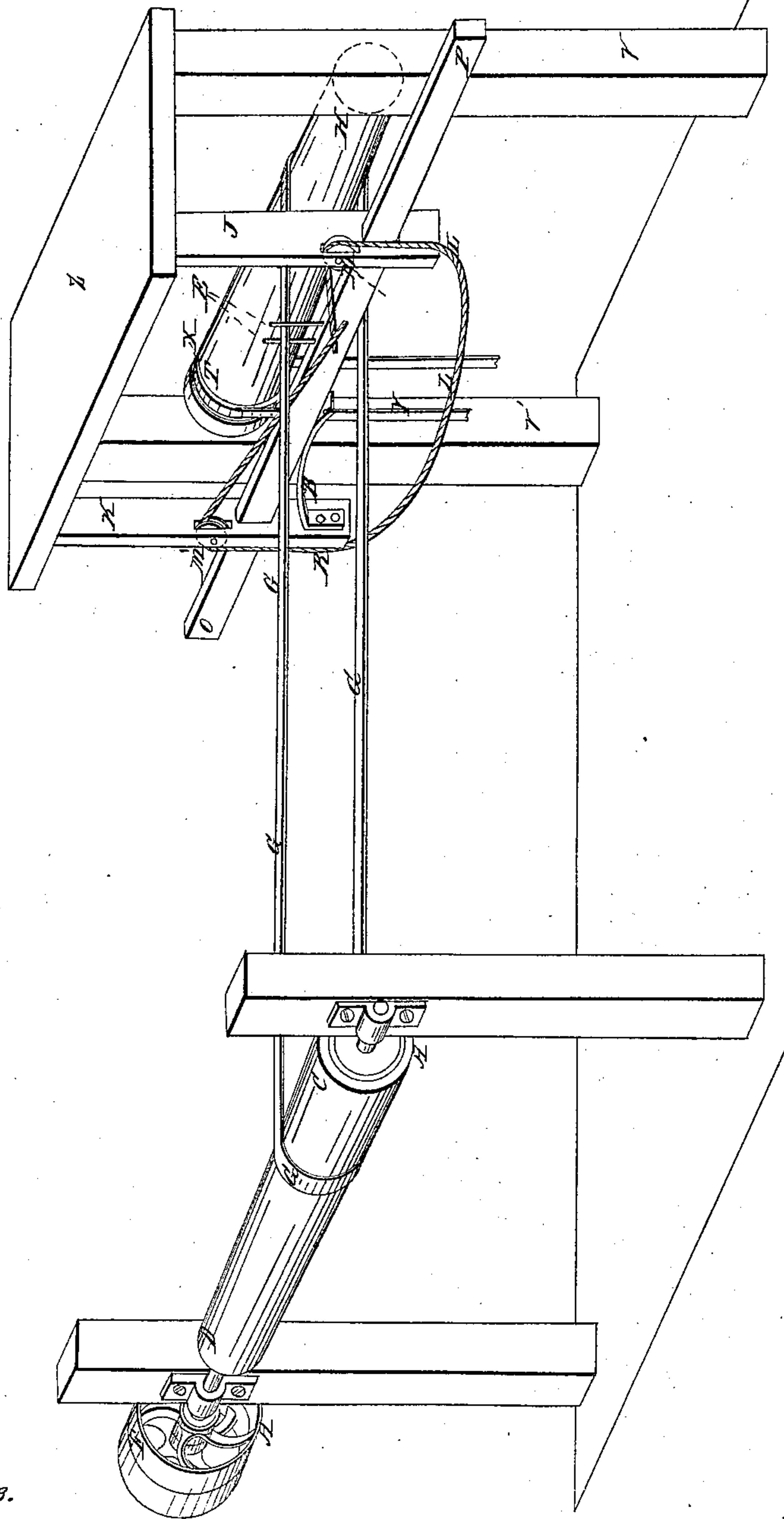


C. M. Langley,
Belt Shifter,

No 68,212,

Patented Aug 27, 1867.



Witnesses.
B. F. Shaw
W. B. Coffin.

Inventor.
C. M. Langley

United States Patent Office.

CLARK M. LANGLEY, OF LOWELL, MASSACHUSETTS.

Letters Patent No. 68,212, dated August 27, 1867.

IMPROVEMENT IN THE MODE OF DRIVING PRINTING-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CLARK M. LANGLEY, of Lowell, in the county of Middlesex, and State of Massachusetts, have invented a new and useful improvement in the "Mode of Driving Printing-Presses;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, making a part of this specification.

The drawing marked C H S is a perspective view of the mechanism herein described.

My improvement in driving printing-presses relates chiefly to the mode of changing the velocity of the press in order to adapt it for producing the finest kinds of work, or coarse and ordinary styles; and also to change the velocity while any particular job is in progress without stopping the press; also by this use of a driving power of variable velocity the speed of the press is regulated in accordance with the condition of the form, the consistence of the ink, changes of temperature, and the hydrometric condition of the paper. This is effected by the use of double conical drums, or pulleys, and attached mechanism, as shown in the drawing.

The ceiling or top of a room is represented at Z, and depending from it are the hangers V V', which support the conical drum H T, and the hangers J K, which hold the shipping mechanism. Upon the opposite side, at any convenient distance, is the conical drum C D, turning in the bearings A A', and driven by a belt from the prime mover, applied to the pulley F. The large end C is opposite to the small end H of the first-named drum, and the small end D is opposite to the large end T, the respective shafts of the two drums being parallel with each other. The printing-press is driven by the belt Y, passing around the tight pulley X, which is of the same size as the large end T of the conical drum; this belt Y is slipped upon the loose pulley W when the press is to be stopped. The belt G leads from the drum C D to the drum H T, and drives the latter. The drum C D turns at a uniform rate, and the velocity of the belt Y depends upon the position of the belt G upon the two cone drums, the speed being greatest when the belt G runs from the large end C to the small end H, and least when it runs from D to T. The position of the belt upon the drums is governed at will by the attendant by pulling the cord L (which hangs down over the press) to the right or left. The cord passes over the pulleys M M', and is fastened to the shipper-bar O P, which is parallel with the drum. Upon it are two guide pins E, nearly in contact with the edges of the belt G. This shipper-bar slides in suitable guides, and is retained in any required position by the spring R B, one end of the spring being made fast, and the free end bearing upon the shipper-bar.

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

The spring B, which retains the shipper-bar and driving-belt in any required position, in combination with the cord L, the shipper-bar O P, and the double cones, substantially as herein described.

Witnesses:

B. F. SHAW,
V. G. BUFFUM.

C. M. LANGLEY. [SEAL.]