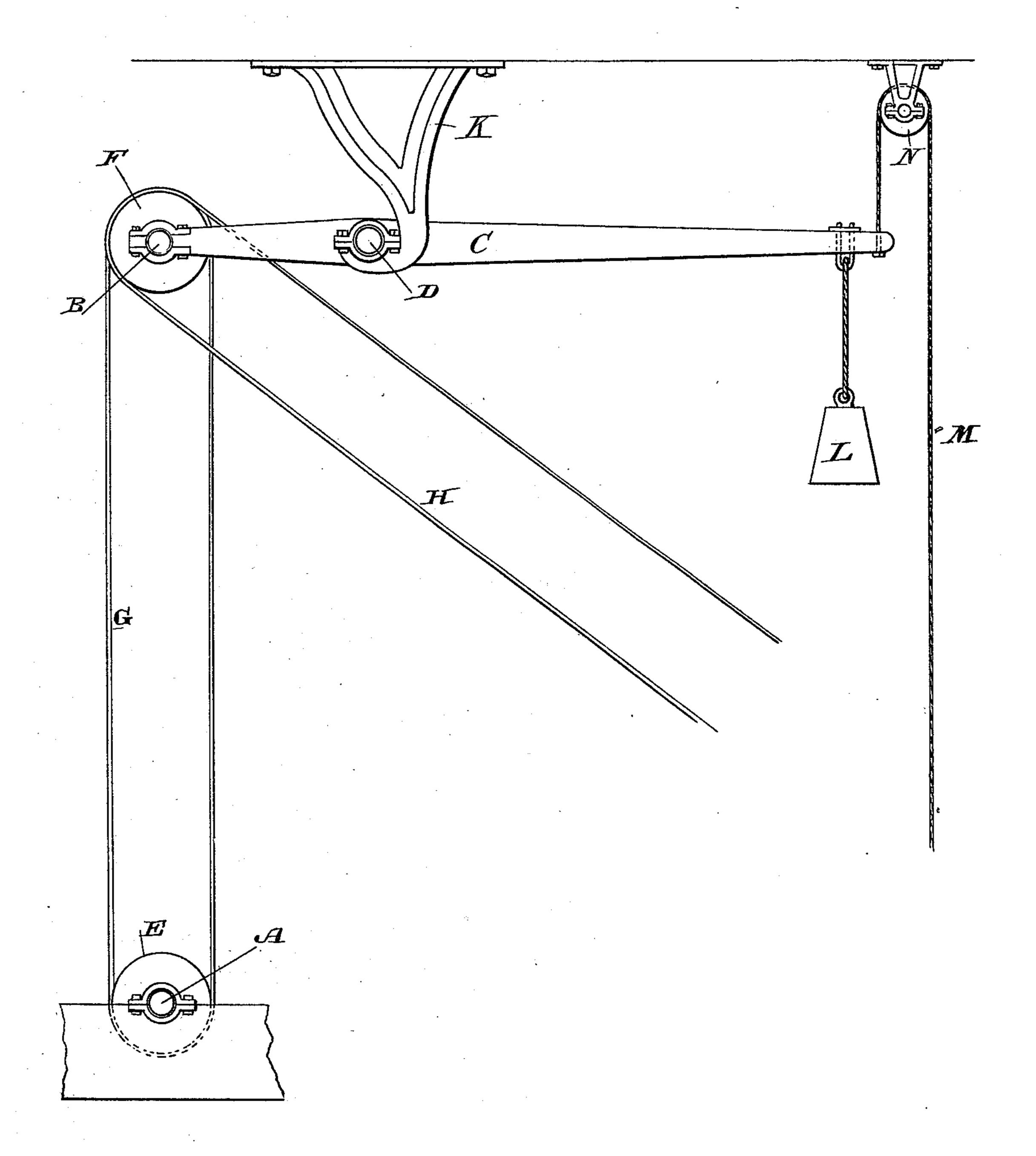
(No Model.)

## P. H. KRONCKE.

COUNTER SHAFT AND BELT TIGHTENER.

No. 408,417.

Patented Aug. 6, 1889.



Witnesses, Eco. H. Alrong Getherusel Peter N. Kroncke By Dewey Ho. altro

## United States Patent Office.

PETER H. KRONCKE, OF SANTA ROSA, CALIFORNIA.

## COUNTER-SHAFT AND BELT-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 408,417, dated August 6, 1889.

Application filed April 15, 1889. Serial No. 307,321. (No model.)

To all whom it may concern:

Be it known that I, Peter H. Kroncke, of Santa Rosa, county of Sonoma, State of California, have invented an Improvement in Adjustable Counter-Shafts and Belt-Tighteners; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a counter-shaft and driving-pulleys and a movable or tilting frame upon which said shaft is journaled, with a means whereby the frame and shaft may be moved, so as to tighten or slacken a belt from a continuously-running driving-shaft, whereby power may be transmitted through the counter-shaft and said shaft started and stopped at pleasure.

Referring to the accompanying drawing for a more complete explanation of my invention, the figure is a view showing an arrangement of my device.

A is a driving-shaft, suitably journaled at any convenient point with reference to the work to be done, and this shaft may be driven continuously either directly or through the medium of belts or other well-known connections.

B is an independent counter-shaft turning in journal-boxes, which are mounted upon the short arm of a tilting or movable frame C.

This frame has fulcrumed pivots at D, which may be journaled upon a hanging bracket K, or upon frame-timbers suitably fixed so that the counter-shaft may stand with relation to the main shaft A as shown.

A and the pulley E upon the main shaft A and the pulley F upon the counter-shaft B a belt G extends, and when the tilting frame is moved, so as to tighten this belt between the pulleys E and F, the counter-shaft will be driven, and through it power may be transmitted, by means of a belt, as shown at H, to any machinery which it is desired to drive intermittently.

I prefer to employ a counter-weight Lupon

the tilting frame C, which shall be sufficiently 45 heavy to give the proper tension to the belt G when the weight is allowed to exercise its power upon the opposite end of the tilting frame, and under these conditions the counter-shaft and any mechanism which may be depend- 50 ent upon it for motion will be driven continuously. When it is desired to throw this mechanism out of action, it is done by moving the frame C, so as to slacken the belt G and allow it to slip or not move upon the counter-shaft, 55 which will thus stop. This movement of the tilting frame may be effected in various ways. In the present case I have shown a rope M attached to its outer end and passing over a pulley N, journaled in a ceiling or frame-work 60 above the tilting frame, the opposite end of the rope extending down to within easy reach of the operator, so that by pulling it the frame will be tilted and the belt G slackened, so that it will not transmit power to the counter-shaft. 65

Various arrangements of this mechanism may be made which will act in essentially the same manner as that herein described.

Having thus described my invention, what I claim as new, and desire to secure by Letters 70 Patent, is—

The combination of the main driving-shaft, a pivoted frame having a counter-shaft journaled upon its short arm, pulleys on the main shaft and counter-shaft, and a belt-connection 75 between said pulleys, a second belt leading from the pulley on the counter-shaft to the mechanism to be driven, a counter-weight connected with the long arm of the pivoted frame, and the connection for tilting the frame, sub-80 stantially as and for the purpose described.

In witness whereof I have hereunto set my hand.

PETER H. KRONCKE.

Witnesses:
S. H. NOURSE,
H. C. LEE.