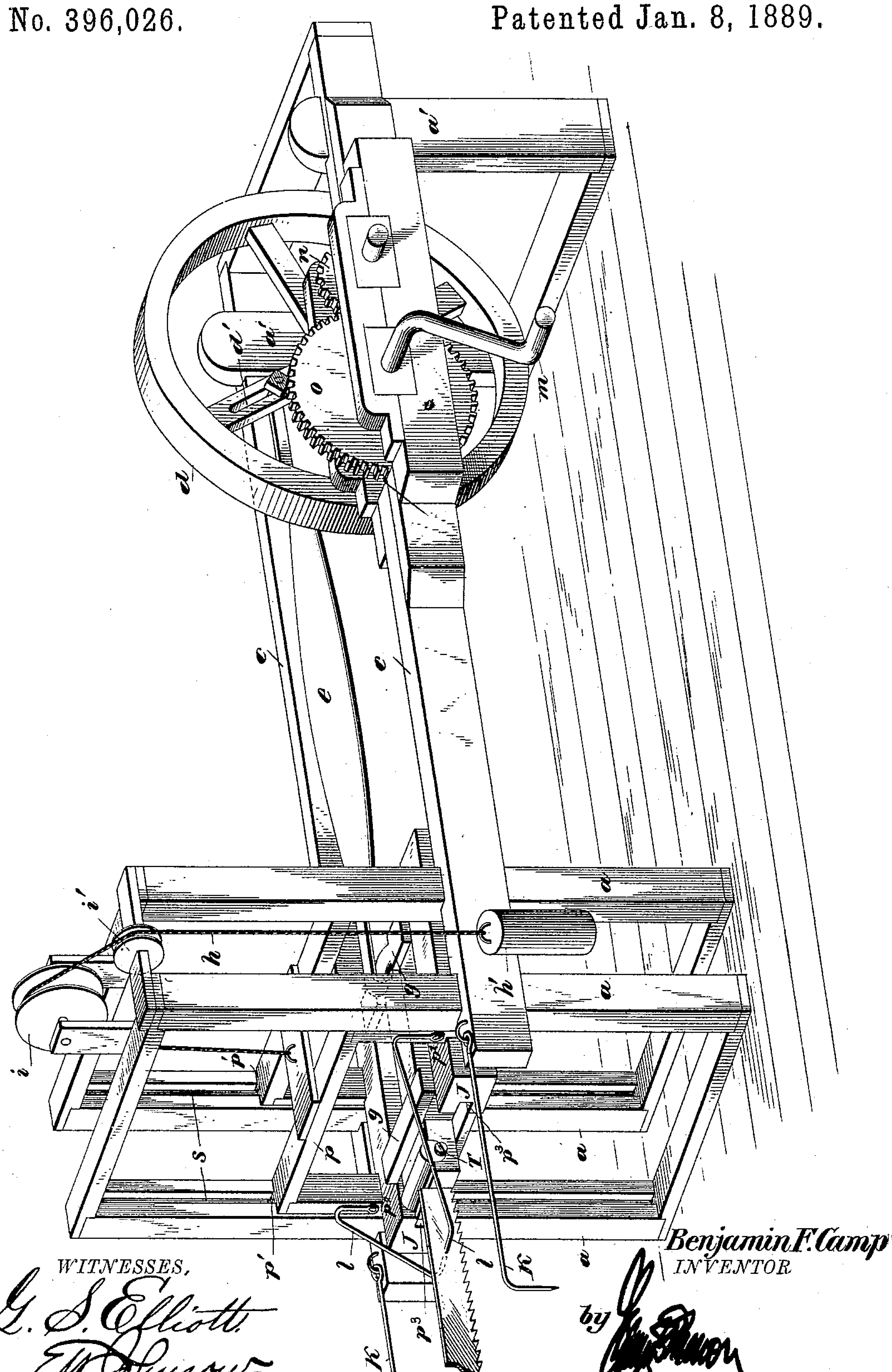
(No Model.)

B. F. CAMP.

WOOD SAWING MACHINE.

No. 396,026. Patented Jan. 8, 1889.



WITNESSES,
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UNITED STATES PATENT OFFICE.

BENJAMIN F. CAMP, OF CLINTON, KENTUCKY, ASSIGNOR, BY MESNE ASSIGNMENTS, OF ONE-HALF TO JOHN E. BOWERS, OF SAME PLACE.

WOOD-SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 396,026, dated January 8, 1889.

Application filed February 20, 1888. Serial No. 265,080. (No model.)

To all whom it may concern:

Be it known, that I, BENJAMIN F. CAMP, a citizen of the United States, residing at Clinton, in the county of Hickman, State of Kentucky, have invented a new and useful Wood-Sawing Machine, of which the following is a specification.

My invention relates to that class of wood-sawing machines in which the saw-blade is secured to and actuated by a cross-head mounted to slide in horizontal ways formed in a gravitating counterbalanced sash or frame, which is in turn mounted to slide in vertical ways secured to the main frame of the machine, the cross-head being connected by pitman with the crank of a driving-shaft.

The object of my invention is to improve, simplify, and cheapen the construction and operation of machines of this character; and to this end my invention consists in details of construction and combinations, to be fully described in the following specification and claimed in the closing clause.

The accompanying drawing is a perspective view of a machine embodying my improvements.

A stout frame is provided, comprising the standards *a a*, legs *a'*, and horizontal sills C. The standards are arranged at the front of the machine, extending upward beyond the sills C, and are provided on their inner faces with parallel grooves forming guides or ways for the reception of tenons *p'*, projecting from the side sills of the gravitating sash-frame *p*. The lower horizontal side beams, p^2, of this sash-frame *p* are grooved on their inner faces to form ways p^3 for the reception of tenons projecting laterally from cross-head *g*, which latter is connected by a pitman, *e*, with a wrist-pin adjustably seated in a radial slot, *d'*, of a fly-wheel, *d*, the shaft of which is mounted in bearings at the rear end of the machine-frame and carries a pinion, *n*, meshing with a cog-wheel, *o*, secured to the power-shaft *m*, which is also mounted in bearings at the rear end of the frame.

To the front end of the cross-head *g* one end of the saw-blade is secured by a set-screw, T, or other well known means, guides *l*, of spring metal, being secured to the front of the gravitating sash-frame adjacent to the cross-head, to bear lightly with their forward or free ends upon the sides of the saw, and prevent the latter from buckling or binding in the kerf during operation.

To the top of the sash-frame is secured a rope or cord, *h*, its free end being passed over pulleys *i i'* at the top of the standards *a*, and provided with weight *h'* of such size as to nearly counterbalance the sash-frame and its adjuncts, thus enabling me to rigidly secure the saw to the cross-head without subjecting it to undue weight during operation. To the front of the frame are hinged the usual log-hooks or dogs, *k*, to hold the log undergoing operation.

In operation a log is secured in front of the frame by means of the hooks *k*, the sash-frame and its adjuncts being first sufficiently elevated by a pull upon the weight-cord *h*, the sash-frame being then lowered until the saw rests upon the log. The machine is then started, and as the saw cuts through the log the gravitating sash will slide downward, carrying the cross-head, &c., with it, thus maintaining the horizontal position of the saw and always giving sufficient weight to the saw to insure a cut, the guides meanwhile always retaining their position with relation to the saw, as they are secured to and travel with the sash-frame.

I claim—

The combination, substantially as described, of the frame provided at front with vertical standards having ways, the gravitating counterbalanced sash-frame mounted in said ways and provided with horizontal grooved side sills, the cross-head mounted to slide in said grooves and connected by pitman with the driving-crank, the saw secured at one end to the front of the cross-head, and guides secured to the sash-frame adjacent to the cross-head and bearing with their free ends upon opposite sides of the saw-blade.

BENJ. F. CAMP.

Witnesses:
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