

D. R. Pratt.

Drag Saw.

N^o 98,628.

Patented Jan. 4, 1870.

Fig. 1.

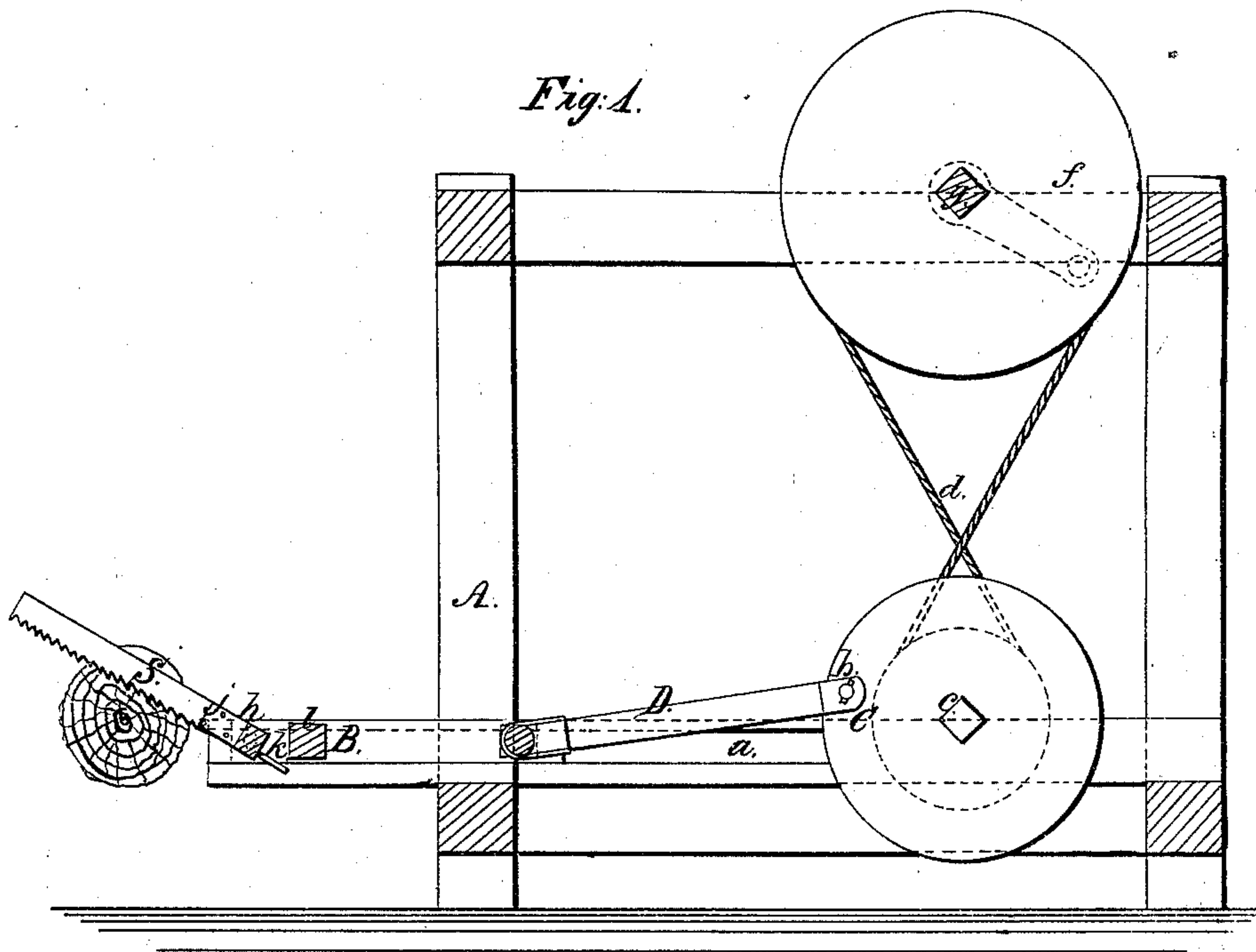
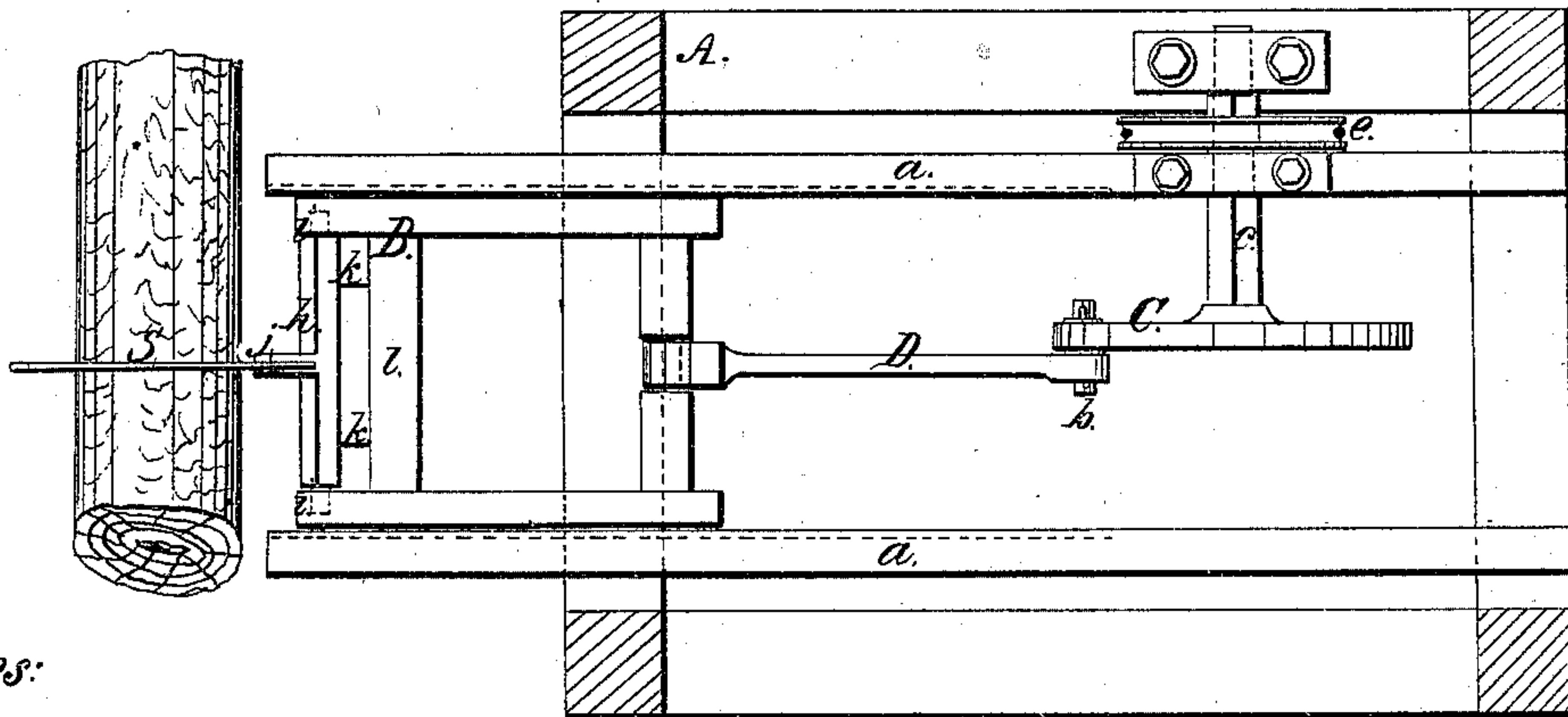


Fig. 2.



Witnesses:

L. Wahler

E. F. Hastenhuber

Inventor:

D. R. Pratt
per
Van Sottrord & Hoff
attys

United States Patent Office.

DAVID R. PRATT, OF NEW PETERSBURG, OHIO.

Letters Patent No. 98,628, dated January 4, 1870.

IMPROVEMENT IN SAWING-MACHINES.

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, DAVID R. PRATT, of New Petersburg, in the county of Highland, and State of Ohio, have invented a new and improved Cross-cut-Sawing Machine; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a longitudinal vertical section of this invention.

Figure 2 is a horizontal section of the same,

Similar letters indicate corresponding parts.

This invention consists in the arrangement of a swivel-head attached to a reciprocating carriage, and provided with a forked bracket or clamp to receive the saw, and with stops, which prevent said head from turning beyond a certain limit, in such a manner that when the saw is brought to act on a log placed at a suitable height, it (the saw) bears down upon said log by its inherent gravity, and by imparting to the saw-carriage a rapid reciprocating motion, the log can be cut with ease and facility.

In the drawing—

The letter A represents a frame, made of wood, and provided with two guide-bars *a*, which, by preference, are placed in a horizontal position, and between which moves the carriage B.

This carriage receives its motions from a disk or crank, C, the eccentric wrist-pin *b* of which connects with the carriage by a pitman, D.

The disk C is mounted on a shaft, *c*, which has its bearings in suitable journal-boxes or pillow-blocks attached to the frame A, and to which motion is imparted by a belt, *d*, running on a pulley, *e*, on the shaft *c*, and on a pulley, *f*, mounted on the driving-

shaft *g*, the diameter of the pulley *f* being considerably larger than that of the pulley *e*, so that the carriage B receives a very rapid motion.

In the other end of the carriage B is secured a head, *h*, which swivels on pivots *i*.

From the outside of this head projects a clamp, *j*, capable of receiving and retaining the saw S; and from the inside of said head project the stops *k*, which bear against the cross-bar *l* of the carriage, and prevent the saw from sinking down beyond a certain position.

When the machine is to be set in operation, a log is adjusted under the saw, in such a position that the swivel-head *h* is turned up, and the saw is allowed to bear down upon the log by its inherent gravity.

By imparting to the carriage a reciprocating motion, the saw rapidly cuts through the log, and when the log is cut, the saw is held up by the stops *k*, and all injury to said saw, from coming in contact with the ground or with the support of the log, is avoided.

By these means a sawing-machine is produced, which is very simple in its construction, which can be operated with little trouble and with a comparatively small expenditure of power, and which allows of cutting logs of any desired thickness with great rapidity.

I disclaim any of the parts shown in the Letters Patent of James W. Maxey, dated March 10, 1868.

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

The head *h*, swivelled in the sliding frame B, and provided in front with a clamp, *j*, and in the rear with projecting stops *k*, which bear against the lower side of the cross-bar *l* of the frame B, when the saw has cut through the log, as and for the purpose described.

DAVID R. PRATT.

Witnesses:

NICHOLAS CARPER, Jr.,

JOHN SMITH.