(No Model.)

W. M. WILKIN.

SAW MILL DOG.

No. 294,711. Patented Mar. 4, 1884.

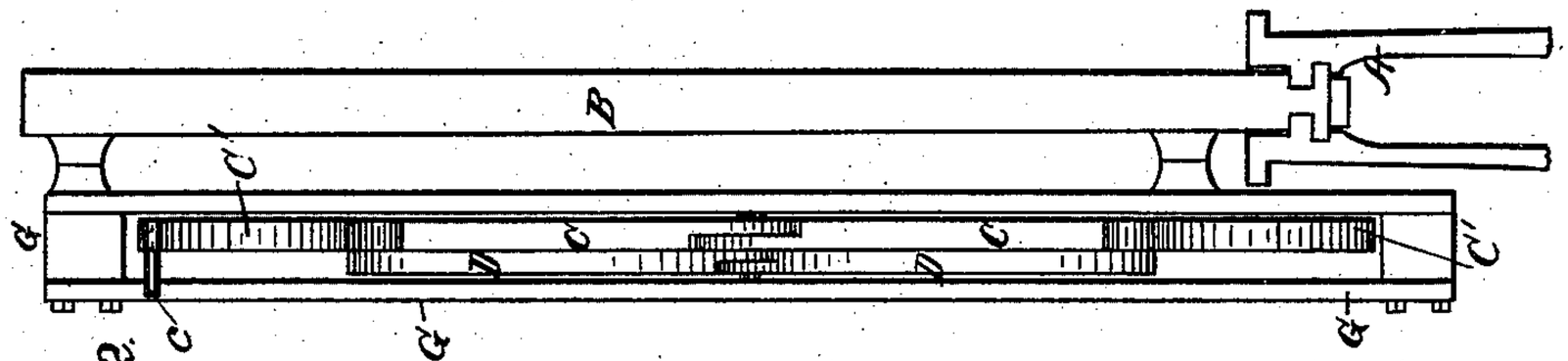

Fig. 2.

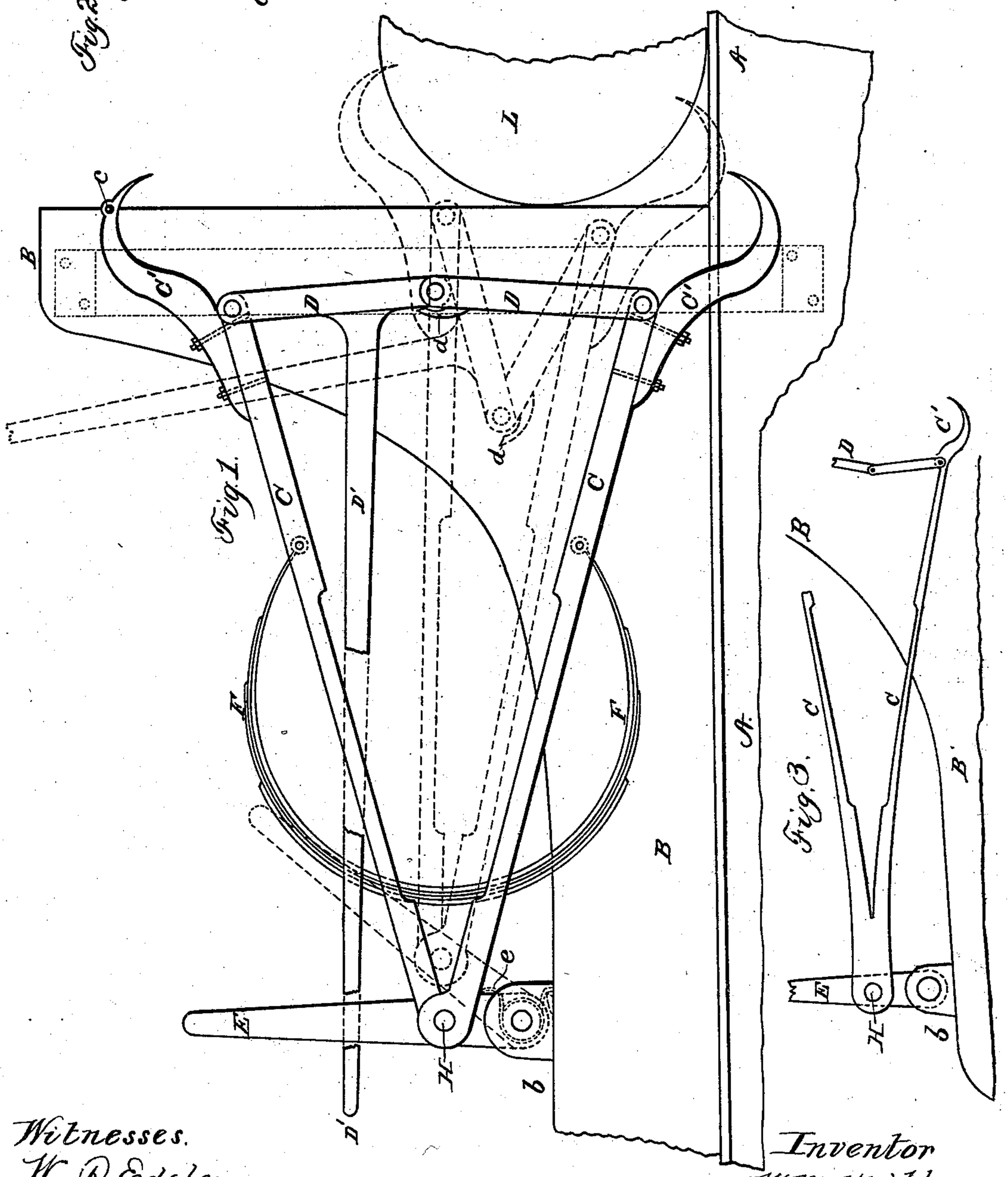

Fig. 1.

Fig. 3.

Witnesses.
W. R. Edelen
Robt A Porter.

Inventor
W. M. Wilkin.
Per Mullock & Mullock
Att's

UNITED STATES PATENT OFFICE.

WILLIAM M. WILKIN, OF ERIE, PENNSYLVANIA.

SAW-MILL DOG.

SPECIFICATION forming part of Letters Patent No. 294,711, dated March 4, 1884.

Application filed March 21, 1882. Renewed January 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. WILKIN, a citizen of the United States, and a resident of Erie, in the county of Erie and State of Pennsylvania, have invented new and useful Improvements in Saw-Mill Dogs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters or figures of reference marked thereon.

My invention relates to the dogging apparatus of a saw-mill head-block; and it consists in certain improvements or modifications of the construction shown in an application for a patent now pending in the Patent Office, of which I am also the inventor. In the apparatus to which I have just referred, two dogs are arranged so as to grasp the log or cant from opposite directions, and are pivoted together by their shanks, which are long, and near their bits they are pivoted to bars, which extend back to the back part of the knee, and are there pivotally attached to the knee. Several modifications were shown in that application; but in all of them the dogs are shown as separate from the bars, which are pivotally connected to the knee near its rear end, which bars were generally shown and described as spring-bars. In my present invention the dogs are either firmly connected to these bars or an integral part thereof, being forged on the ends thereof. My present invention also contains other minor features, which will appear in the following description.

My device is illustrated in the accompanying drawings as follows:

Figure 1 is an outline side elevation. Fig. 2 is a front elevation. Fig. 3 is a modification of the construction shown in Fig. 1.

A is the base-block on which the knee moves. B is the knee. C C are the spring-bars. C′ C′ are the dog-bits. D D are the toggle-levers by which the dogs are operated from and toward each other. D′ is the lever by which the toggles are moved. E is the lever by which the dogging apparatus is moved out from or back to the face of the knee. F is a spring connected to the bars C C. G is a frame on the side of the knee, for holding the dogging apparatus in place.

The spring-bars in Fig. 1 are shown as pivoted together at H on the lever E, and have a spring, F, for giving them the effect of spring-bars. In Fig. 3 these bars are shown as forged out of one piece of steel, and so shaped as to be in fact spring-bars.

In Fig. 1 the dog-bits C′ C′ are shown as bolted fast to the bars C C, and in Fig. 3 they are shown as forged upon the ends of the spring-bars. I deem it preferable to have the dog-bits connected to the spring-bars, as shown in Fig. 1, for the reason that they can be removed and sharpened with greater facility than when they are a part of the spring-bar.

The object in having the dogs C′ C′ on the bars C C rather than on the toggles D D, as in the former case referred to, is that the bits will enter a log of one size at the same angle as a log of a greater or less size, while, when they are on the toggles D, they tip in their movement and change their angles, so that on small logs they do not strike fairly, or, if made so as to strike fairly on a small log, they would not get a good hold on a big one.

The objects and purposes of the levers D′ and E are fully set forth in the said former application, and need not be here repeated. In this construction I provide the lever E with a spring which will keep it back. This spring is shown as a coil-spring, (see *e* in Fig. 1;) but it may be of any form. On the dog C′, I place a stop-pin or lug, *c*, which comes in contact with the rack or frame G and prevents the dogs being drawn entirely back of the face of the knee. When the lever E is left free, the spring *e* will throw it back, so as to draw the dogs in, and the pin *c* will act as a stop to prevent the dogs going in beyond the face of the knee. When the parts are in this position, if the toggles are loosened and the dogs allowed to come toward each other, the spring *e*, if undisturbed, will keep the lever E back, and compel the pin *c* to keep upon the face of the rack G, and hence the dogs will move in a direct line down and up the face of the knee. This movement is effected when the dog is being used as a board-dog.

What I claim as new is—

1. In the dogging apparatus of a saw-mill head-block, which consists of dog-bits actuated by spring-bars, substantially as shown, to drive them into the log or cant, which spring-bars are provided with other proper mechanism for withdrawing the bits from the

log or cant, the said dog-bits formed upon or firmly attached to the outer extremities of said spring-bars, for the purposes mentioned.

2. In the dogging apparatus of a saw-mill head-block wherein the dog-bits are actuated to enter the log or cant by spring-bars which are attached back of the face of the knee to or connected with a lever, E, by which the said dog-bits can be moved more or less beyond the face of the knee, the combination therewith of a spring operating upon said lever to automatically hold back said dog-bits until the power of said spring is overcome by power applied to said lever E, and a stop near said dog-bits for preventing the said dog-bits from being drawn back wholly within the face of the knee by the said spring operating upon said lever, for the purposes mentioned.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of March, 1882.

WILLIAM M. WILKIN.

Witnesses:
M. F. HALLECK,
W. S. BROWN.