

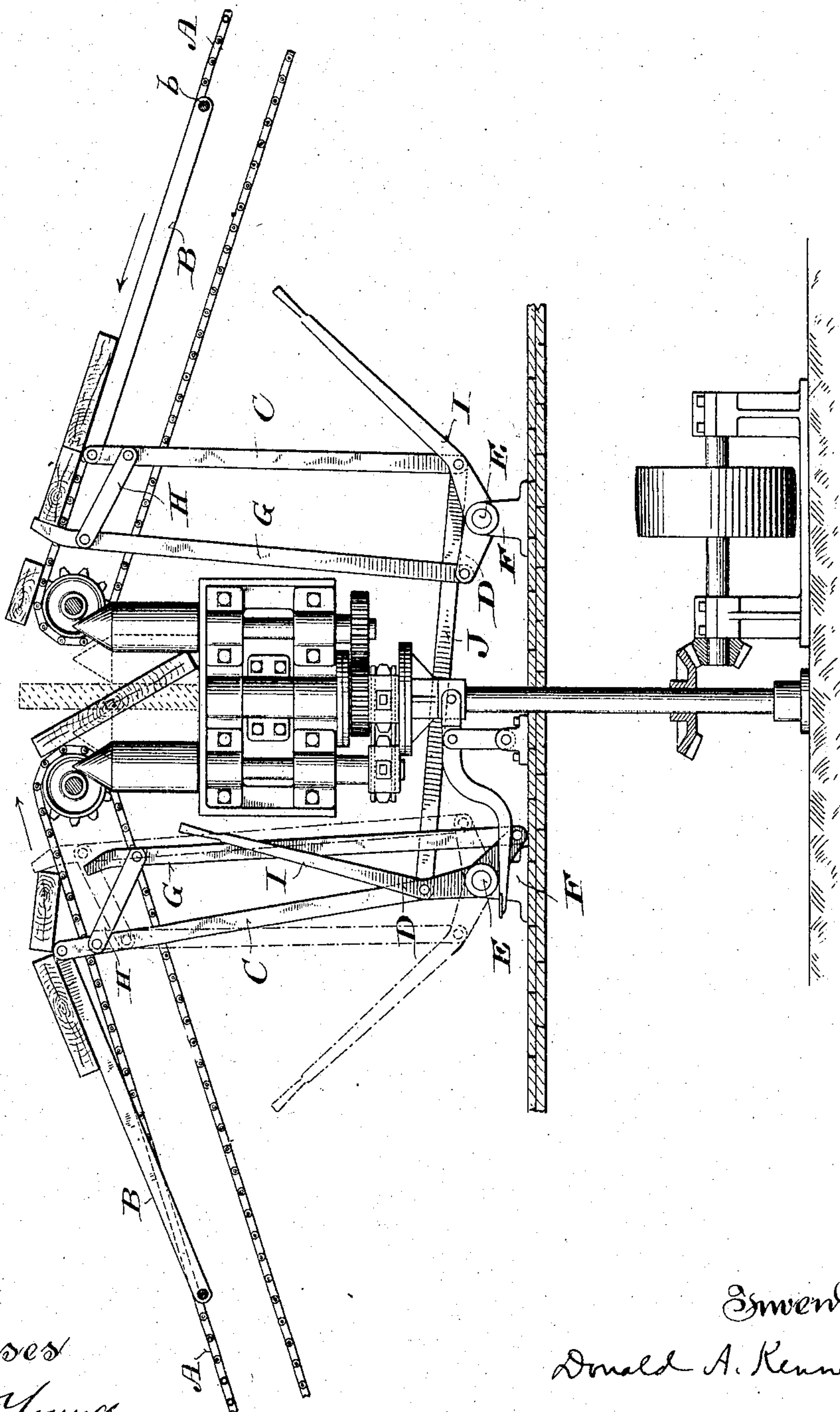
No. 778,366.

PATENTED DEC. 27, 1904.

D. A. KENNEDY.
SAWMILL MACHINERY.
APPLICATION FILED JUNE 4, 1904.

3 SHEETS—SHEET 1.

Fig. 1.



Witnesses
Geo. W. Young
N. E. Oliphant

Inventor:
Donald A. Kennedy
By H. G. Underwood
Attorney.

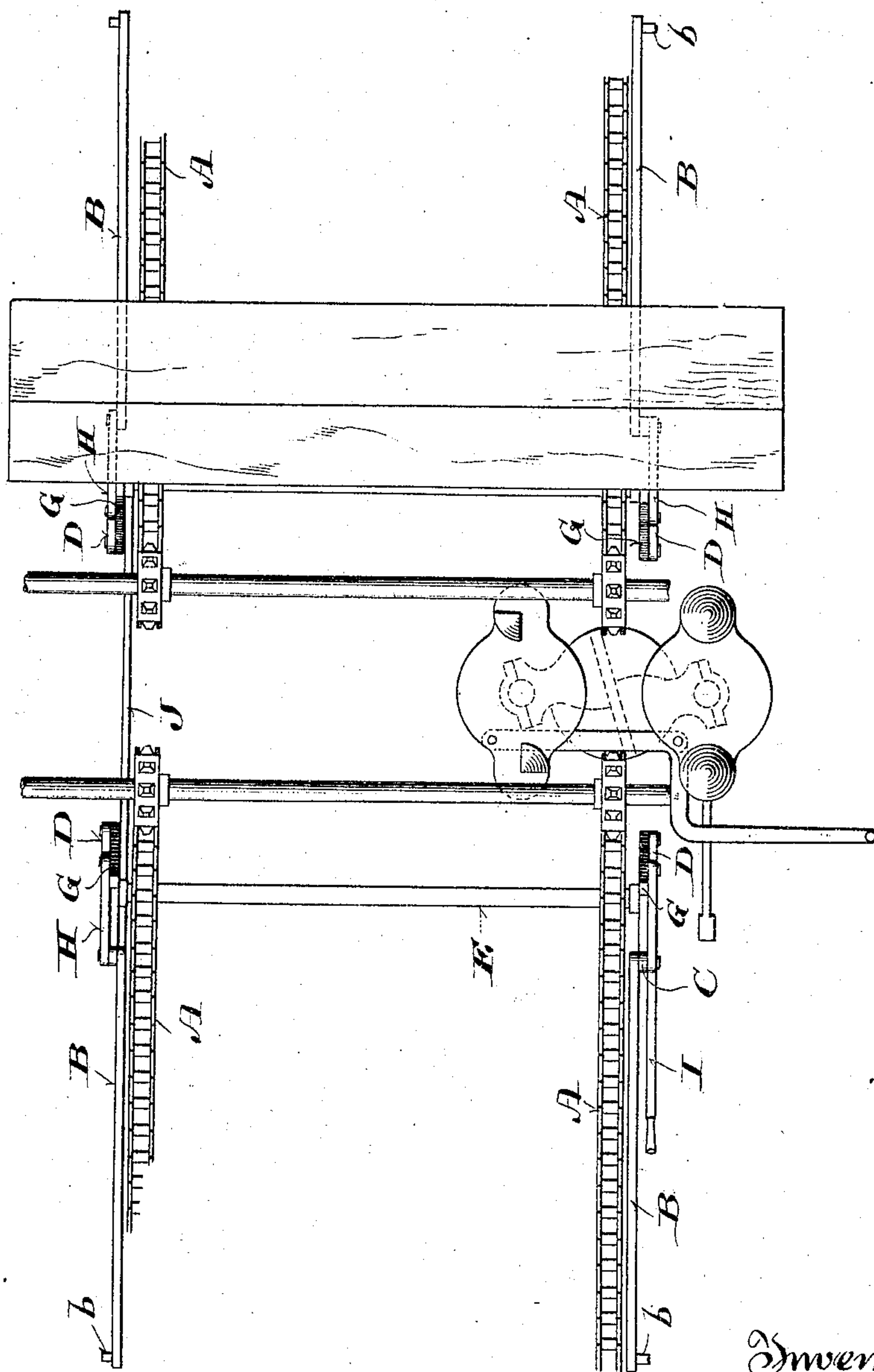
No. 778,366.

PATENTED DEC. 27, 1904.

D. A. KENNEDY.
SAWMILL MACHINERY.
APPLICATION FILED JUNE 4, 1904.

3 SHEETS—SHEET 2.

Fig. 2.



Inventor

Daniel A. Kennedy

By H. G. Underwood

Attorney

Witnesses
Geo. W. Young
N. E. Oliphant

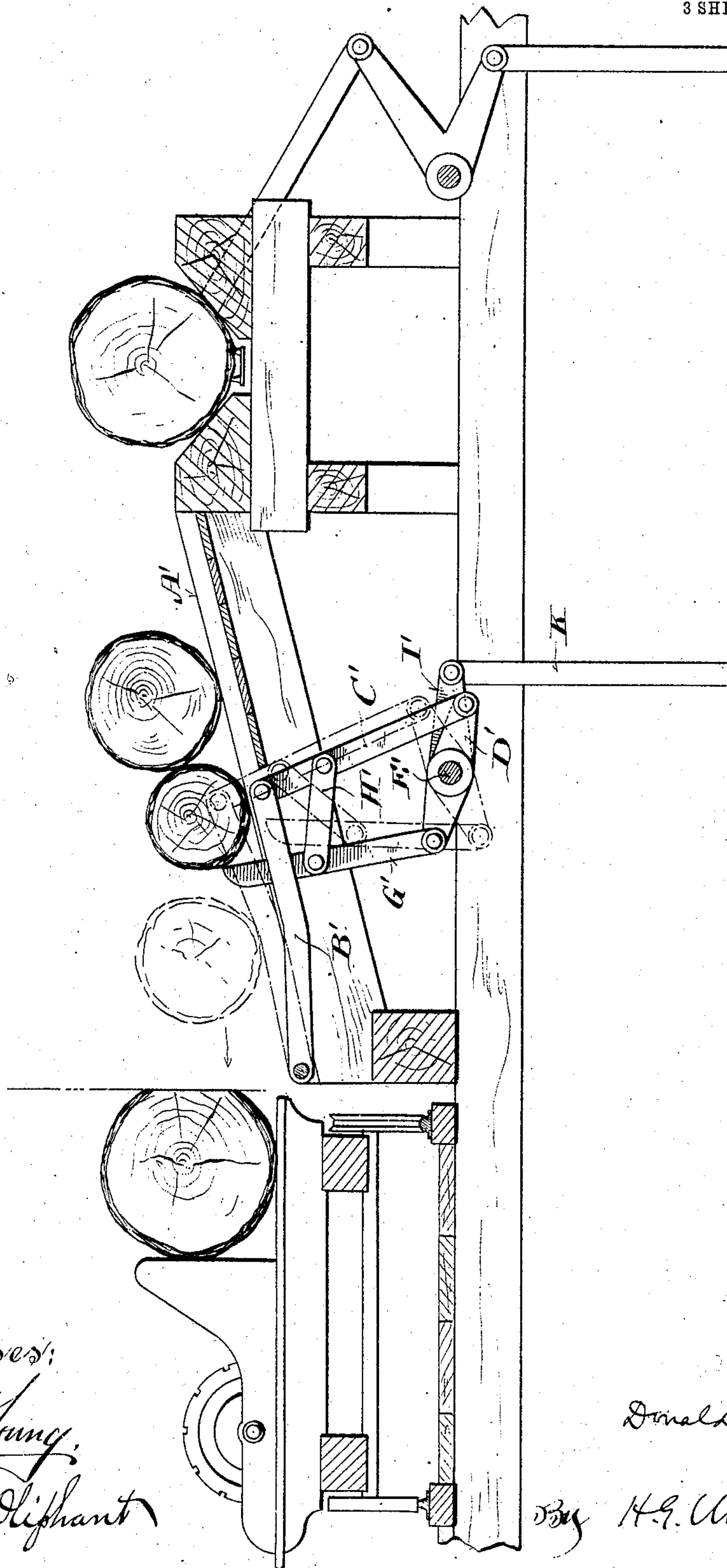
No. 778,366.

PATENTED DEC. 27, 1904.

D. A. KENNEDY.
SAWMILL MACHINERY.
APPLICATION FILED JUNE 4, 1904.

3 SHEETS—SHEET 3.

Fig. 3.



Witnesses:
Geo. W. Young,
N. E. Oliphant

Inventor
Donald A. Kennedy
By H. G. Underwood
Attorney

UNITED STATES PATENT OFFICE.

DONALD A. KENNEDY, OF ASHLAND, WISCONSIN.

SAWMILL MACHINERY.

SPECIFICATION forming part of Letters Patent No. 778,366, dated December 27, 1904.

Application filed June 4, 1904. Serial No. 211,107.

To all whom it may concern:

Be it known that I, DONALD A. KENNEDY, a citizen of the United States, and a resident of Ashland, in the county of Ashland and State of Wisconsin, have invented certain new and useful Improvements in Sawmill Machinery; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for one of its objects to provide for stopping, straightening, and releasing one at a time the pieces of lumber fed on transfer-conveyers to a resaw-feeder or elsewhere in a sawmill.

Another object of the invention is to control the feed of logs from an inclined log-deck to a carriage; and a further object of said invention is to protect the link belts or chains of transfer-conveyers, as well as rolls and other mechanism of log-decks.

These objects I attain by the construction and arrangement of parts hereinafter particularly set forth with reference to the accompanying drawings, and subsequently claimed.

Figure 1 of the drawings represents a front elevation of a resaw-feeder similar to the one set forth in my Patent No. 747,979, of December 29, 1903, fragments of transfer-conveyers that discharge onto the resaw-feeder from opposite sides of the same, and mechanism in accordance with my invention for stopping, straightening, and releasing pieces of lumber fed on the conveyers, a floor and gearing in this view being in section; Fig. 2, a plan view of what is shown in the view aforesaid, and Fig. 3 a sectional view illustrating an application of my invention to the incline of a log-deck in proximity to a carriage.

Referring by letter to Figs. 1 and 2 of the drawings, A indicates each of the transfer-conveyers arranged as above stated. Lengthwise of the link belts of the conveyers, preferably outside the same and flush with or below the upper faces of said belts, are skids B, the lower ends of these skids being provided with lateral pivots b for connection with any suitable supports. The forward end of each skid is pivotally connected to the upper end of a vertically-disposed pitman C, and the lower end of this pitman is likewise connected

to an arm of a bell-crank lever D, fast on a rock-shaft E, for which bearings F are provided on the floor under the resaw-feeder. The other arm of each bell-crank lever is pivotally connected to the lower end of a vertically-disposed stop-bar G, and a link H connects each stop-bar with the adjacent pitman, this connection being at a suitable distance below the adjacent skid. Arms of the levers D are shown as having extensions I in the form of handles. A link J is shown employed in connection with one of the pitmen and bell-crank levers in each set of same, and as a result of this connection the skid and stop-bar mechanism duplicated on opposite sides of the resaw-feeder may be operated by a movement of either of the handles I, although it is practical to omit one of said handles. It is also practical, but not as convenient, to do away with the link J and operate each skid and stop-bar mechanism independent of the other. It also follows that a single transfer-conveyer may be employed to carry lumber to the resaw-feeder or elsewhere in a sawmill, in which case only one of the skid and stop-bar mechanisms will be utilized.

In practice a pair of stop-bars G are lifted by a throw of a corresponding pair of connected bell-crank levers D in the proper direction, and the upper ends of said bars are thus brought in the path of a piece of lumber carried upward by the adjacent transfer-conveyer, the skids A in union with the pitmen C, linked to the aforesaid bars, being then in normal position. The stopped lumber automatically straightens itself if skewed on the conveyer, and when the stop-bars are swung down to clear said lumber the pitmen linked to said arms operate to lift the corresponding skids at an angle to said conveyer, the result being that the forward piece of the lumber is pushed on over said skids by the pressure of the lumber accumulating in the rear. The forward piece of lumber then comes again upon the conveyer and is finally discharged onto the resaw-feeder or other support. By proper manipulation of the skid and stop-bar mechanism the lumber is mechanically alined with the resaw-feeder or other support and

fed thereto piece by piece, the elevation of the skids relieving the link belts of the conveyer from friction on the stopped lumber.

When the skid and stop-bar mechanism is duplicated, to be operated in conjunction with two opposite transfer-conveyers and the coupling-link J is employed, one set of skids are lifted when the other set are lowered, and the same is true of the stop-bars.

10 In Fig. 3, A' indicates the incline of a log-deck and B' one of a plurality of skids pivotally adjustable between the sides of said incline. The pivot connection of the skid with the log-deck incline is a rod engaging the
15 lower ends of both, and for a certain distance from the saw-line said skid is by preference normally parallel to a head-block, its remainder being then approximately parallel to said incline slightly below the surfaces on which
20 the logs descend. In normal position the lower portion of each skid B' of the preferred form extends above the log-deck, and its upper end is pivotally connected to an extremity of a vertically-disposed pitman C', likewise
25 connected to an arm of a lever D', fast on a rock-shaft E', another arm of this lever being in pivotal connection with the lower end of a vertically-disposed stop-bar G', connected by a link H' with the pitman aforesaid. An extension I' of one of the several levers D' is
30 coupled to a pitman K, and this pitman is operated by steam or other suitable power. Logs rolling down the incline of the deck aforesaid are successively stopped by the bars
35 G' in their path and properly alined against said bars. The skids B', of which there may be any suitable number, extend under a log stopped against the bars G', and if the pitmen C' be lifted said skids will be swung up-
40 ward and said bars retracted out of the path of the log. As a result of upward swing on the part of the skids and clearance of the stop-bars the log is discharged onto the adjacent carriage. Lifting of the skids prevents
45 the log from rolling on other mechanism (not shown) in the log-deck, and when lifted the upper ends of the skids and the pitmen C' come in the path of another descending log to prevent the same from rolling farther down
50 the incline of the deck until said skids and the stop-bars G' are restored to normal position.

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

55 1. The combination with a transfer-conveyer, pivotal skids lengthwise of the conveyer-belts and flush with or below the upper

faces of same, suitably connected and mounted bell-crank levers having arms thereof coupled, by pitmen, with the skids forward of
60 their pivots; stop-bars connected to the other arms of said levers to be lifted forward of said skids in the path of material on the conveyer, and a link connecting each stop-bar with a
65 pitman.

2. The combination of opposite transfer-conveyers, pivotal skids lengthwise of the conveyer-belts and flush with or below the upper faces of same, suitably connected and
70 mounted bell-crank levers each having an arm thereof coupled, by a pitman, with a skid forward of its pivot; a stop-bar connected to the other arm of each of said levers to be lifted forward of a skid in the path of material on a
75 conveyer, a link connecting each stop-bar with a pitman, and another link in connection with one of the pitmen and bell-crank levers in each set of same.

3. The combination of a log or lumber way, pivotally-adjustable skids lengthwise of said
80 way, a rock-shaft having lever-and-pitman connection with the skids beyond the pivots of same, stop-bars arranged in lever connection with the shaft to have their play forward of the skid-pitmen, and means for actuating
85 said shaft.

4. The combination with opposite transfer-conveyers, of means for stopping, straightening and releasing pieces of lumber fed successively on each conveyer, the release from
90 one conveyer alternating with a stop of material fed on the other.

5. The combination of a log or lumber way, pivotal skids lengthwise of said way, reciprocal vertically-movable stop-bars, and means
95 for simultaneous adjustment of said skids and stop-bars.

6. The combination with a log or lumber way, pivotally-adjustable skids lengthwise of said way, a rock-shaft having lever-and-pit-
100 man connection with the ends of the skids farthest from the pivot of same, stop-bars in lever connection with the shaft, a link connecting each stop-bar with a skid-pitman, and means for actuating said shaft.
105

In testimony that I claim the foregoing I have hereunto set my hand, at Ashland, in the county of Ashland and State of Wisconsin, in the presence of two witnesses.

DONALD A. KENNEDY.

Witnesses:

M. KENNEDY,
J. J. McDONALD.