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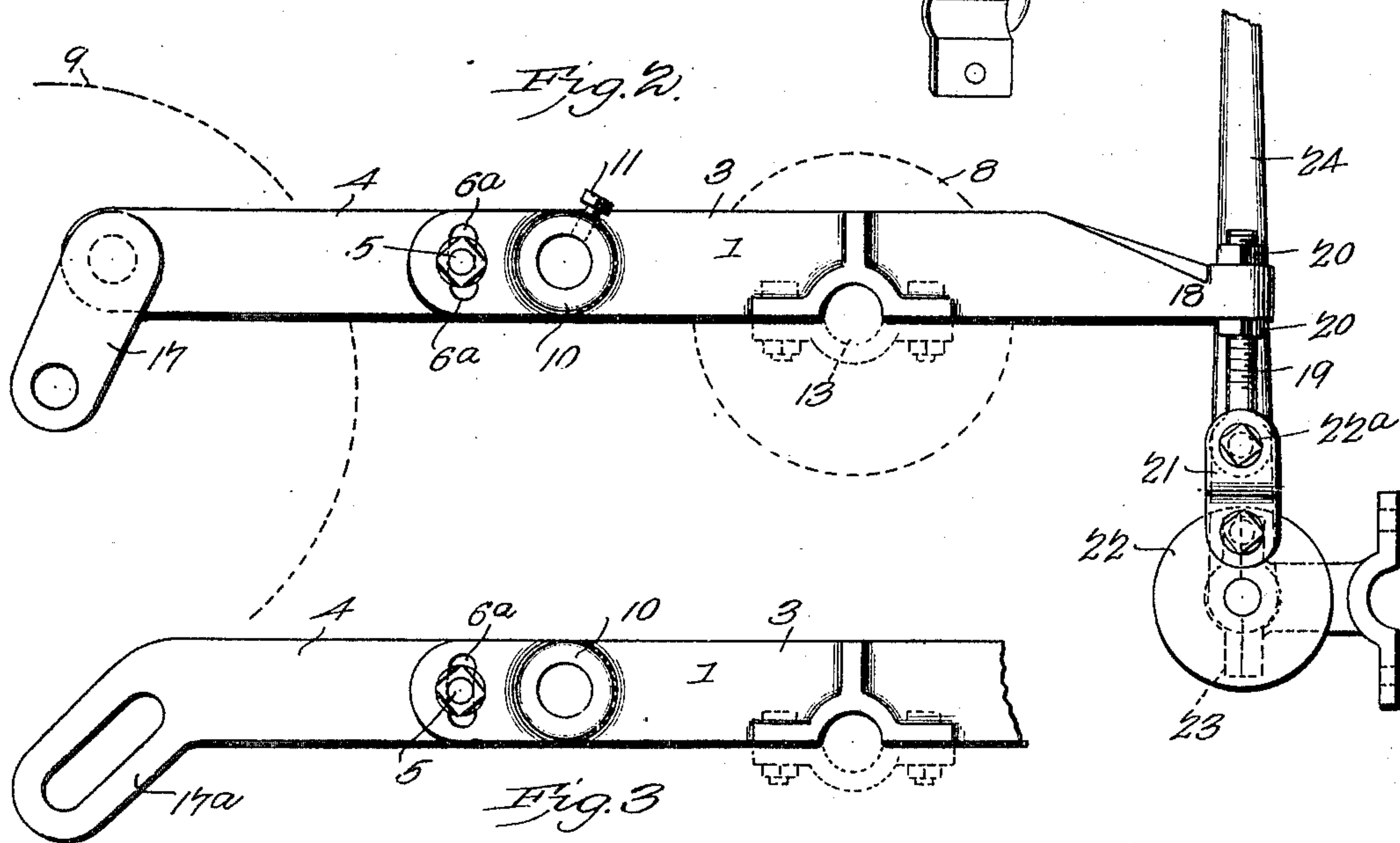
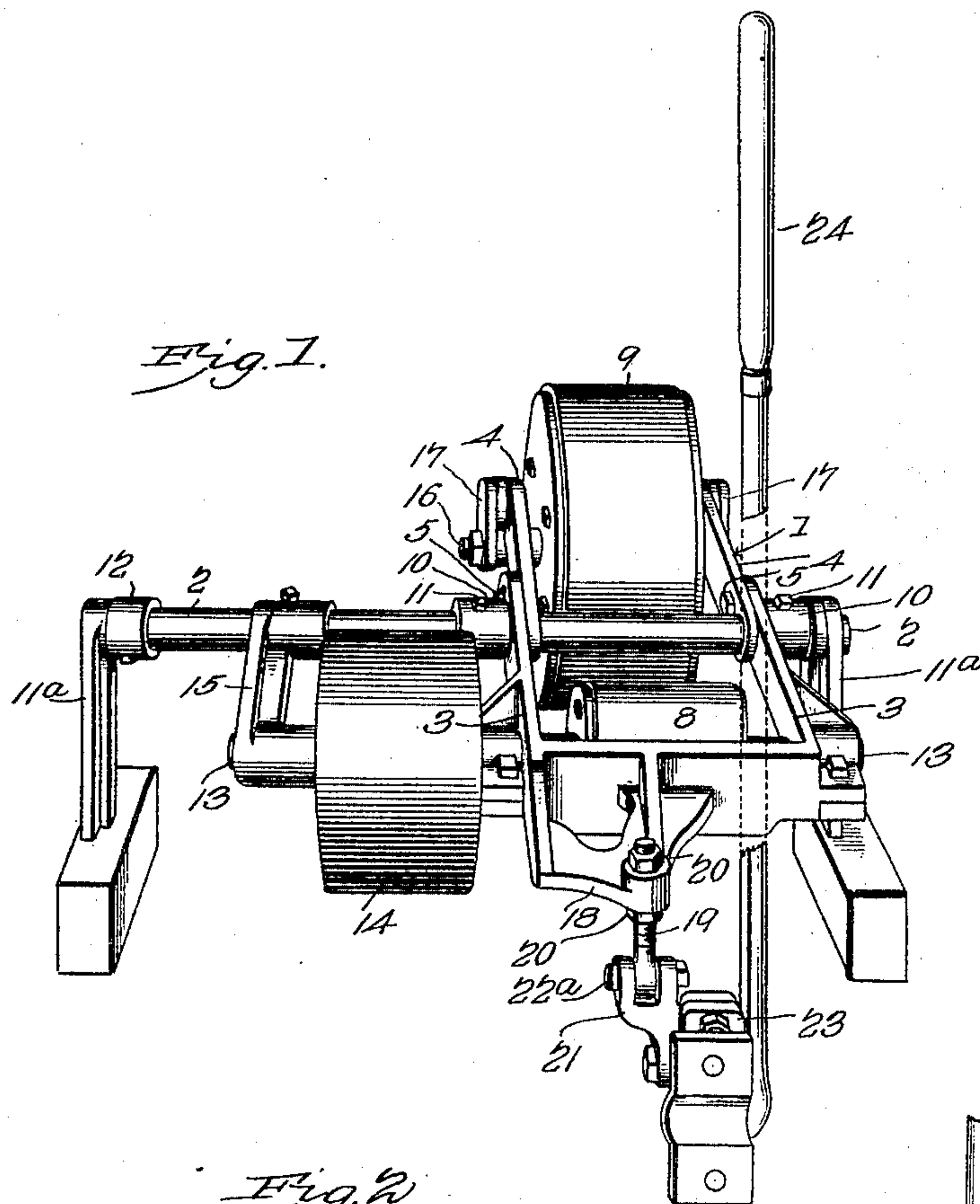
Patented Aug. 5, 1902.

A. C. OSBORN.
SAWMILL FEED.

(Application filed Nov. 1, 1901.)

(No Model.)

2 Sheets—Sheet I.



Witnesses
B. F. Stewart
H. R. Riley

A. C. Osborn, Inventor.
by *C. A. Snow & Co.*
Attorneys

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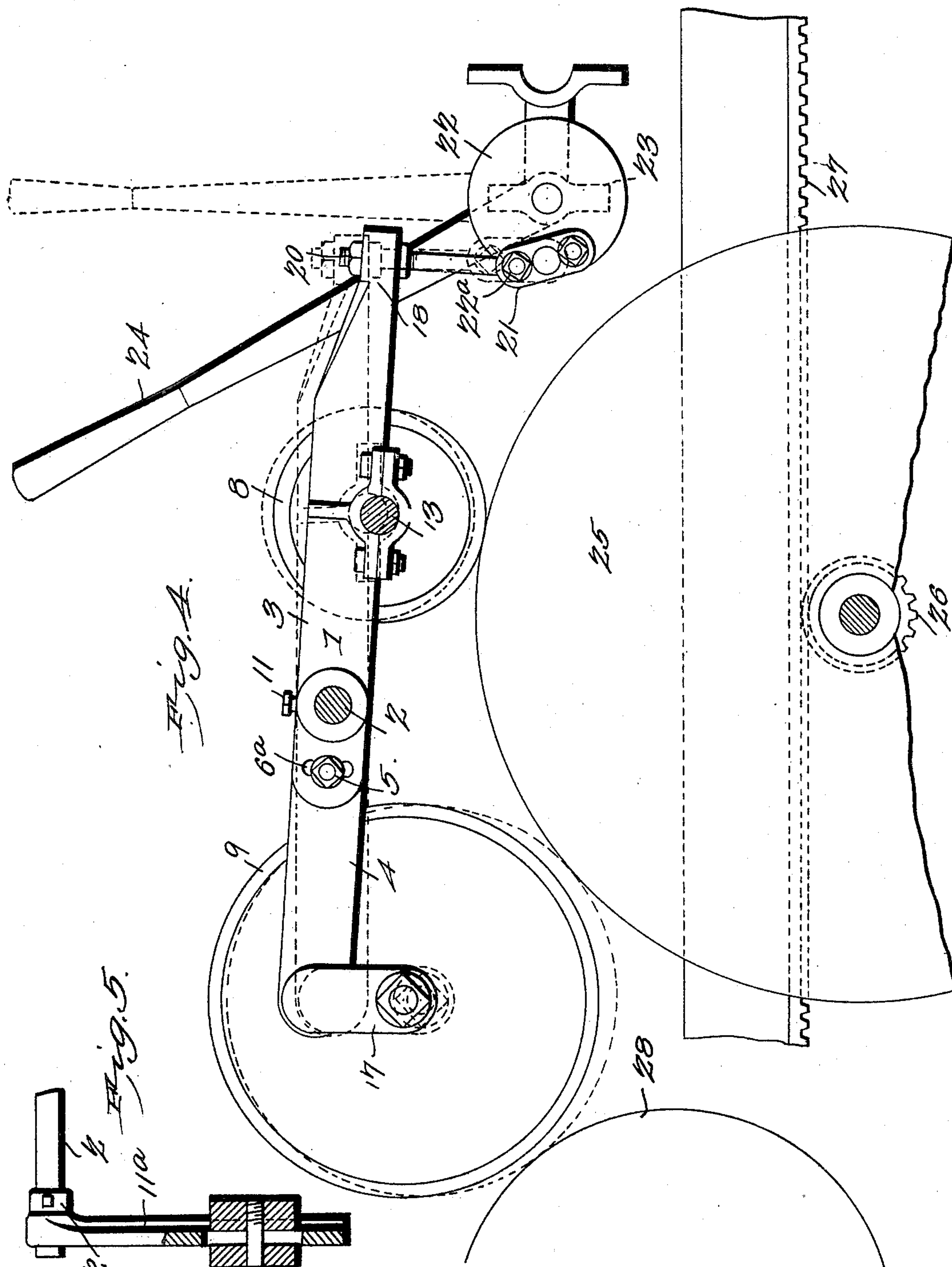
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2 Sheets—Sheet 2.



Witnesses
E. J. Howard
J. H. Riley

by *H. C. Osborn, Inventor.*
Chas. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

ALEXANDER C. OSBORN, OF CLARKSBURG, WEST VIRGINIA.

SAWMILL-FEED.

SPECIFICATION forming part of Letters Patent No. 706,339, dated August 5, 1902.

Application filed November 1, 1901. Serial No. 80,772. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER C. OSBORN, a citizen of the United States, residing at Clarksburg, in the county of Harrison and State of West Virginia, have invented a new and useful Sawmill-Feed, of which the following is a specification.

The invention relates to improvements in sawmill-feeds.

10 The object of the present invention is to improve the construction of feed mechanism for sawmill-carriages and to provide a simple and comparatively inexpensive one capable of being readily operated to move a sawmill-carriage in either direction and capable of ready
15 adjustment to take up any wear on the friction-wheels.

The invention consists in the construction and novel combination and arrangement of
20 parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a sawmill-feed constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a detail
25 view of a portion of the frame, illustrating a modification of the invention. Fig. 4 is a side elevation, partly in section, showing the invention applied. Fig. 5 is a detail view
30 illustrating the construction of the adjustable bearing-brackets.

Like numerals of reference designate corresponding parts in all the figures of the drawings.
35

1 designates an oscillatory frame disposed approximately horizontally and mounted on and extending from opposite sides of a shaft 2, which forms a pivot for the frame. The
40 frame is composed of sections 3 and 4, having parallel sides overlapped at their adjacent ends and provided with alined bearing-openings for the reception of the shaft 2. The sides of the inner or rear section 4 are arranged
45 at the inner faces of the sides 3 and are perforated for the reception of bolts 5 or other suitable fastening devices, which extend through slots 6^a of the sides of the outer or front section 3 and which are provided at
50 their outer ends with nuts. The sections are rigidly connected together by this construction, which permits them to be adjusted to

take up any wear on friction-wheels 8 and 9, carried by the sections 3 and 4 of the frame. The sides of the section 3 are preferably provided with exteriorly-arranged hubs 10, secured by clamping-screws 11 or other suitable fastening devices to the shaft 2, whereby the frame is rigidly mounted on the said shaft.
55 60

The shaft 2 is journaled in vertically-adjustable bearing-brackets 11^a, which are designed to be provided with slot and bolt connections or any other means for securing them at the desired adjustment. The shaft is held
65 against longitudinal movement in the bearings of the bracket 11 by means of collars 12, arranged on the shaft at the inner sides of the brackets and provided with suitable clamping-screws.
70

The friction-wheel 8, which is arranged at the front or outer portion of the oscillatory frame, is mounted on a shaft 13, which carries a pulley 14 and which is supported by an arm 15, fixed to the shaft 2 and arranged
75 at the outer side of the pulley 11, as clearly shown in Fig. 1. The pulley 14 is designed to receive a drive-belt, and the pulley 9 is mounted on a shaft 16, suspended from the sides of the section 4 of the frame by links
80 17. The links, which are perforated at their lower ends to provide bearings for the shaft 16, are suitably pivoted at their upper ends to the section 4. The friction-wheels 8 and 9, which are preferably constructed of paper,
85 but which may be of any desired construction, are designed to be arranged over a large friction-wheel 25, which is connected with the mechanism for actuating the sawmill-carriage, and this mechanism may be the ordinary spur-gear 26 and rack-bar 27, or it may
90 be provided with a cable or rope for moving the sawmill-carriage. The feed-wheel 8, which is smaller than the friction-wheel 9, is designed to be driven by a belt, as before described, and the friction-wheel 9 is designed
95 to be arranged adjacent to a power-driven iron friction-wheel 28 on the sawmill. When the frame is oscillated in one direction by the means hereinafter described, one of the friction-wheels is carried into its engaging or
100 operative position, and when the frame is moved in the opposite direction the other friction-wheel is brought into operation. By

this construction the sawmill-carriage may be moved in either direction and may be quickly reversed. The large friction-wheel 9 is adapted to move the sawmill-carriage backward quickly in carrying a log backward to arrange it for another cut, and the small friction-wheel feeds the carriage forward while the log is being cut. Should the friction-wheels become worn, they may be readily adjusted to secure the proper frictional engagement by adjusting the sections of the frame.

The frame is provided at its front or outer portion with an arm 18, having an opening at its outer end for the reception of an eyebolt 19, which is adjustably secured to the arm by means of upper and lower nuts 20, arranged at the upper and lower faces of the arm. The adjustable eyebolt depends from the arm and is connected by a link 21 with an eccentric 22, which may be of any desired construction and which is preferably provided with a wrist-pin for the reception of the link. The upper portion of the link is bifurcated to receive the eye of the depending screw or bolt, which is connected with the link by a suitable pivot or bolt 22^a. The eccentric is mounted on a shaft or pivot, which is journaled in a bearing-bracket 23 and which has an operating-lever 24 connected with it. The bearing-bracket may be of any desired construction and may be operated in any suitable manner, and the operating-lever is adapted to be oscillated to operate the oscillatory frame. The eyebolt and the nuts permit a ready adjustment of the parts, and the bearing-brackets 11, which are designed to be adjustably mounted on the husk-frame of a sawmill-carriage, also enable the parts to be raised and lowered. By these two adjustments the feed mechanism may be readily mounted in proper position with relation to the friction-wheel of the gearing that is connected with the sawmill-carriage frame.

Instead of employing swinging links 17 for permitting the friction-wheel 9 to adjust itself automatically to a friction-wheel of the sawmandrel slotted arms or extensions 17^a may be used, as illustrated in Fig. 3 of the accompanying drawings.

It will be seen that the feed mechanism is simple and comparatively inexpensive in construction, that it is easily operated, and that when feeding a log to a saw the amount of

feed may be varied, as desired, by a greater or less pressure by the operator on the lever, thereby enabling him to vary the amount of feed from nothing to the maximum provided for. Also it will be seen that the mechanism is capable of vertical adjustment and that the frame is also adjustable to enable any wear of the friction-wheels to be readily taken up.

What I claim is—

1. In a device of the class described, the combination with pulleys 25 and 28 of an oscillatory frame pivotally mounted between its ends and composed of sections adjustably connected together, wheels mounted on the sections of the frame and carried by the latter, and means for operating the frame, substantially as described.

2. In a device of the class described, the combination with pulleys 25 and 28 of a shaft, an oscillatory frame composed of sections having aligned openings to receive the shaft and adjustably connected together, wheels mounted on the frame and located at opposite sides of the shaft, and means for operating the frame, substantially as described.

3. In a device of the class described, the combination with pulleys 25 and 28 of a shaft, an oscillatory frame mounted on the shaft and extending from the same in opposite directions, a feed-wheel mounted on the frame at one side of the shaft, links depending from the frame and arranged at opposite sides of the shaft, a wheel supported by the lower ends of said links, and means for operating the frame, substantially as described.

4. In a device of the class described, the combination with pulleys 25 and 28 of the vertically-adjustable bearings, a shaft mounted thereon, a frame mounted on the shaft and extending from the same in opposite directions, a pair of links supported by the frame and pivotally connected with the same, a friction-wheel supported by the links, a feed-wheel mounted on the frame, and operating mechanism connected with the frame, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALEXANDER C. OSBORN.

Witnesses:

W. H. LEWIS,
THOS. HAYMOND.