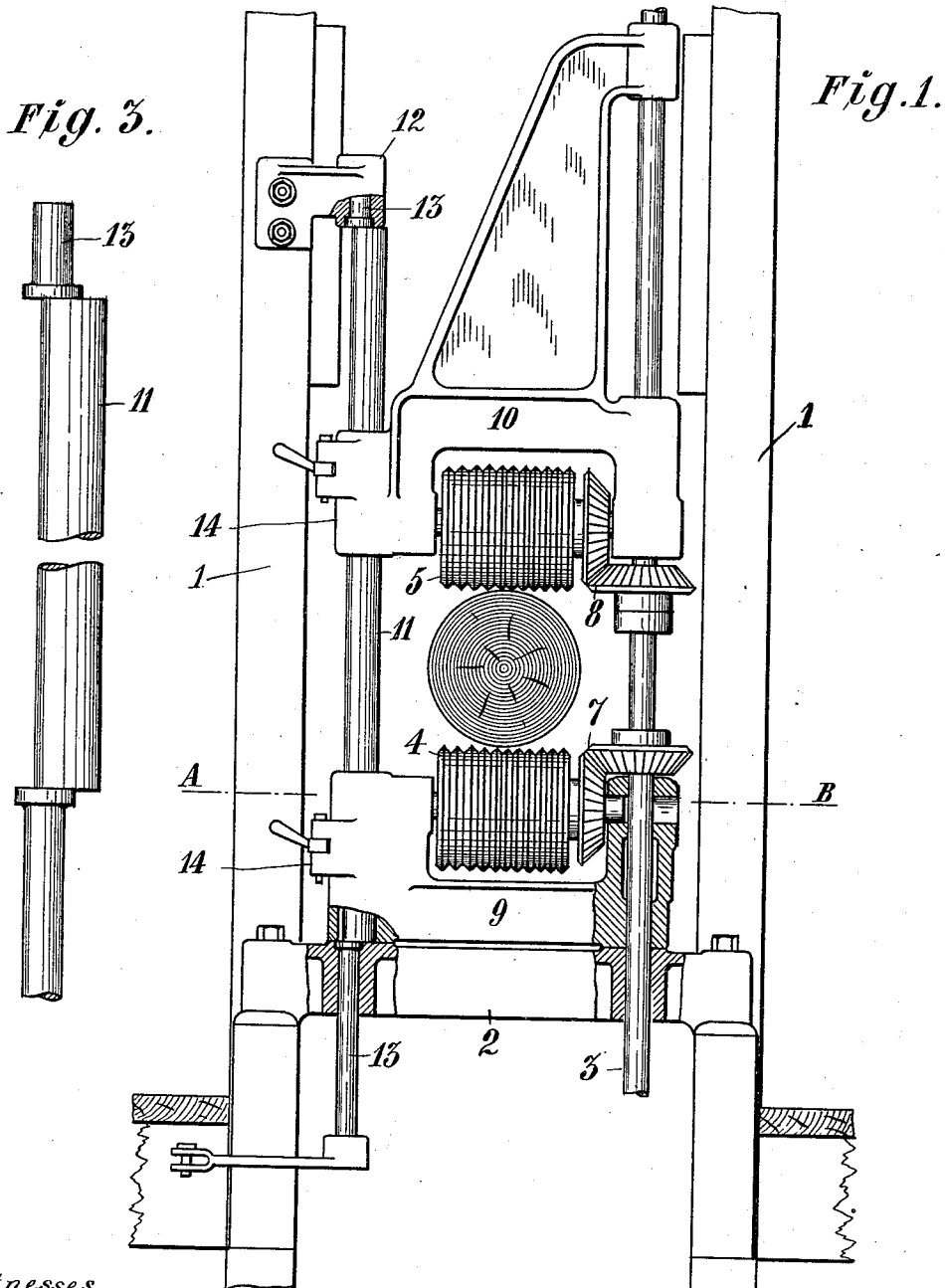


A. J. TENOW & J. E. BOSTRÖM.
SAWING MACHINE AND THE LIKE.
APPLICATION FILED FEB. 23, 1911.

1,007,157.

Patented Oct. 31, 1911.

2 SHEETS-SHEET 1.



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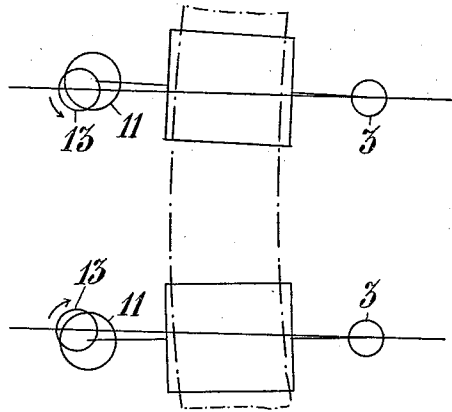


Fig. 4.

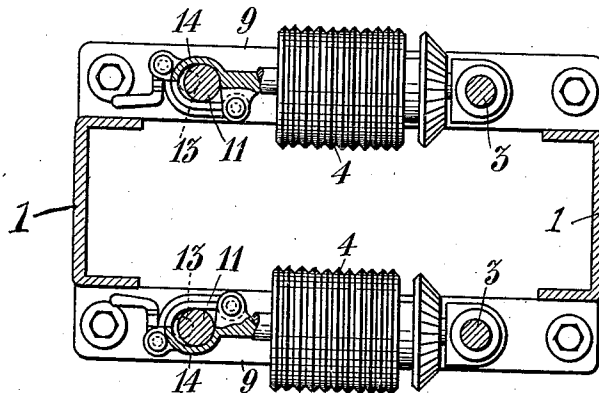


Fig. 2.
A-B.

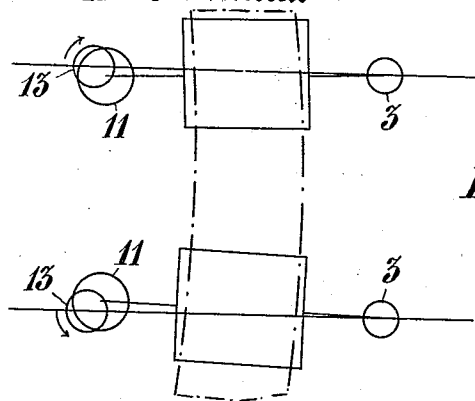


Fig. 5.

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UNITED STATES PATENT OFFICE.

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SAWING-MACHINE AND THE LIKE.

1,007,157.

Specification of Letters Patent.

Patented Oct. 31, 1911.

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To all whom it may concern:

Be it known that we, ADOLF JULIUS TENOW and JOHAN EDWARD BOSTRÖM, subjects of the King of Sweden, residing in Stockholm, in the Kingdom of Sweden, the latter temporarily in St. Petersburg, in the Empire of Russia, have invented new and useful Improvements in Sawing-Machines and the Like, of which the following is a specification, reference being had to the drawings accompanying and forming a part hereof.

This invention relates to improvements in sawing machines and the like.

In sawing crooked or curved timber along its curvature the devices hereto employed have usually been placed in the path of the timber outside the machine frame, *i. e.* in front of the said frame or behind the same.

The object of the invention is to make it possible to place the contrivances for sawing curvilinearly within the machine frame proper which is advantageous in several respects, above all as regards simplicity and easy attendance.

In the drawings, we have shown a sawing machine embodying the invention.

Figure 1 is a front view of the machine frame with the contrivances for adjusting the rolls. Fig. 2 is a plan view and partial horizontal section along the line A—B of Fig. 1. Fig. 3 is a detail view showing in elevation the crank shaft for adjusting the rolls in position. Figs. 4 and 5 show diagrammatically in what manner the rolls may be adjusted in one direction or the other.

Referring to the drawings, 1 is the machine frame and 2 are cross beams attached thereto. Journaled in the said cross beams and in the upper part of the machine frame are axles or shafts 3 transmitting motion by means of bevel gears 7 and 8 to rolls 4 and 5. The said rolls are journaled in frames 9 and 10 adapted to swing about the shafts 3 without the engagement of the bevel wheels being disturbed. The upper frames 10 are also movable up and down on the shafts 3 together with the bevel gears 8. The swinging of the frames 9 and 10 with the rolls 4 and 5 is effected by axles or shafts 11 journaled in the cross-beams 2 and in bearings 12 attached to the machine frame 1. The pins 13 of the shafts 11 journaled in the frame are eccentric relatively to the shafts

so that the latter are swung along a circular arc when the pins are turned. The shafts 11 are engaged by jaw-like sleeves 14 at the frames 9 and 10, and the openings in the sleeves corresponding to the shafts are oblong in the longitudinal direction of the frames, in order to enable the shafts to swing. Connected to the lower pins 13 of the shafts 11 is a suitable lever mechanism connected to both shafts 11 in such a manner as to always turn both shafts equal angles in opposite directions.

It appears from the aforesaid that, when the shafts 11 are swung about their pivot pins 13, said shafts act to swing the frames 9 and 10 with the rolls 4 and 5 journaled therein through a certain angle. If the shafts 11 are swung away from each other so are also the rolls (see Fig. 4), and if the said shafts are swung toward each other, as shown in Fig. 5, the rolls are also swung inwardly toward each other. In both cases the rolls, on account of their oblique positions, will feed the crooked timber in such a manner as to cause the same to be sawed along its curvature.

We claim:

1. In a sawing machine, the combination of a stationary frame, vertical shafts mounted in the said frame, upper and lower frames adapted to swing about the said shafts, said upper frames being also movable vertically along the said shafts, rolls journaled horizontally in the said swingable frames, and means for adjusting the said swingable frames in position about the said shafts.

2. In a sawing machine, the combination of a stationary frame, vertical shafts mounted in the said frame, upper and lower frames adapted to swing about the said shafts, said upper frames being also movable vertically along the said shafts, rolls journaled horizontally in the said swingable frames, and crank shafts engaging the said swingable frames for adjusting same in position relatively to the stationary frame.

3. In a sawing machine, the combination of a stationary frame, vertical rotary shafts journaled in the said frame, upper and lower frames adapted to swing about the said shafts, said upper frames being also movable vertically along the said shafts, rolls journaled horizontally in the

said swingable frames, means for imparting rotary movement from the said shafts to the said rolls, and means for adjusting the said swingable frames in position about the
5 said shafts.

4. In a sawing machine, the combination of a stationary frame, vertical rotary shafts journaled in the said frame, upper and lower frames adapted to swing about the
10 said shafts, said upper frames being also movable vertically along the said shafts, rolls journaled horizontally in the said swingable frames, means for imparting rotary movement from the said shafts to the
15 said rolls, and crank shafts engaging the said swingable frames for adjusting same in position relatively to the stationary frame.

5. In a sawing machine, the combination of a stationary frame, vertical rotary shafts
20 journaled in the said frame, upper and lower

frames adapted to swing about the said shafts, said upper frames being also movable vertically along the said shafts, jaw-like sleeves arranged in the said swingable frames, rolls journaled horizontally in the
25 said swingable frames, means for imparting rotary movement from the said shafts to the said rolls, and crank shafts engaging the sleeves of the swingable frames for adjusting the positions of the rolls.

ADOLF JULIUS TENOW.

Signed by the said Adolf Julius Tenow in the presence of—

ERNST SCONUM,

AUG. SORENSEN.

JOHAN EDWARD BOSTRÖM.

Signed by the said Johan Edward Bostrom in the presence of—

A. KUMPMINE,

AUG. MIGHIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
