No. 752,701. PATENTED FEB. 23, 1904.

C. A. NORLIN.

SAW TABLE GAGE.

APPLICATION FILED OCT. 3, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

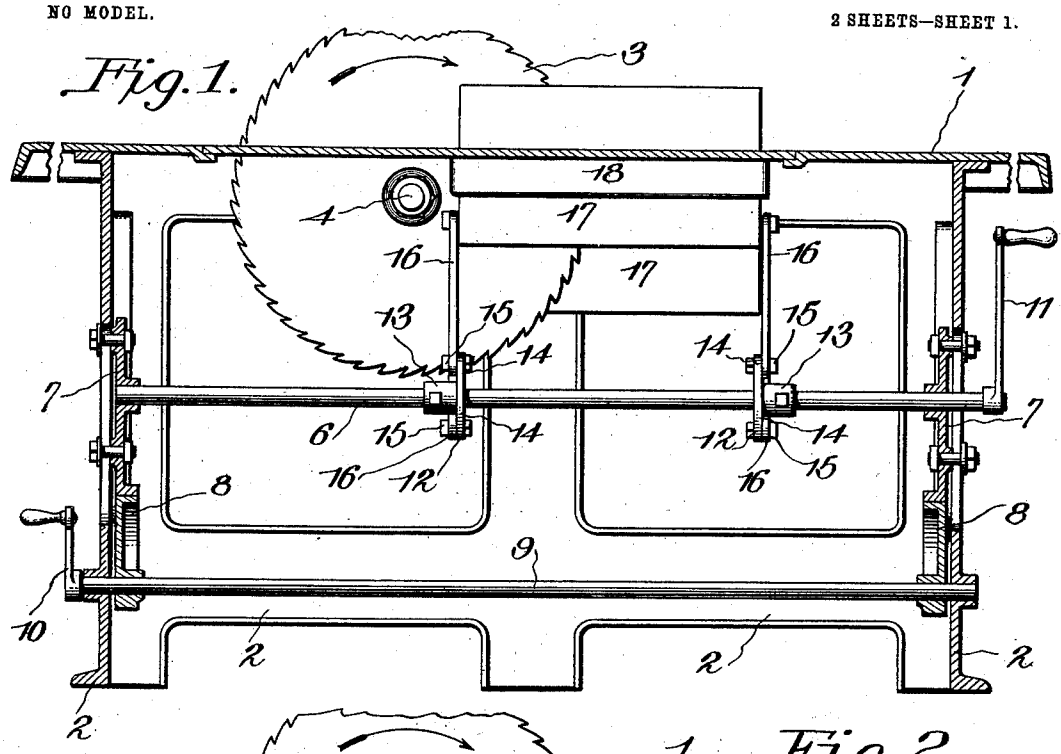
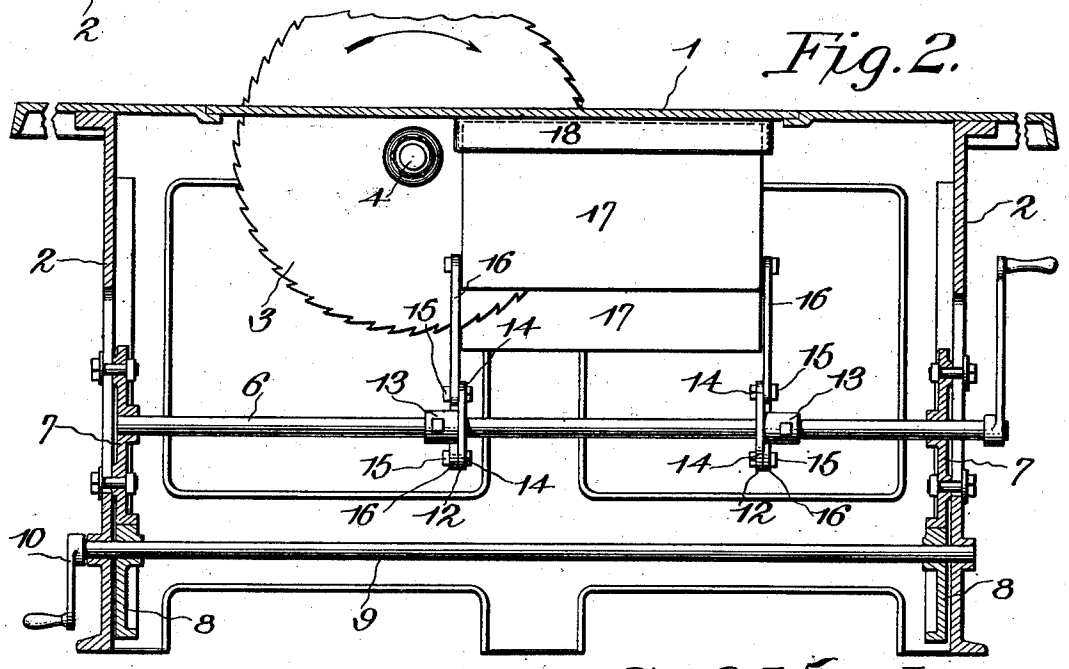


Fig. 2.



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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

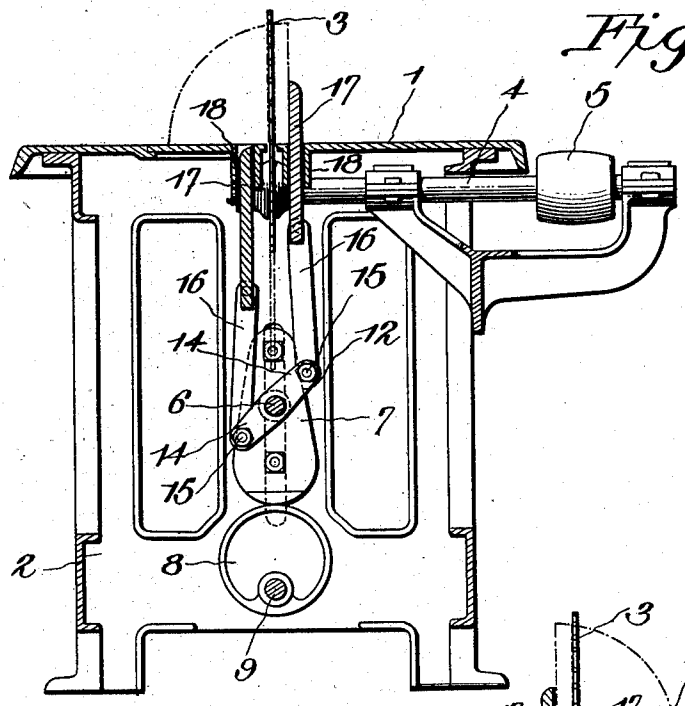


Fig. 4.

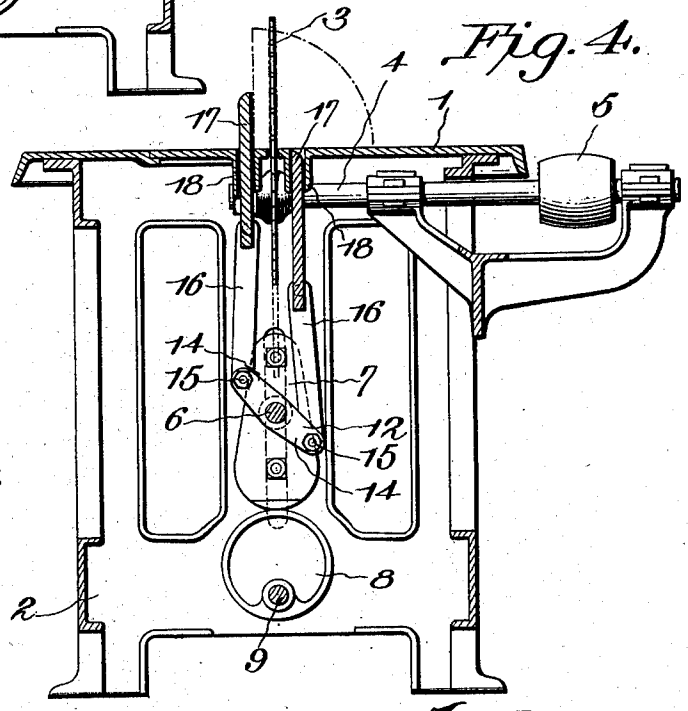
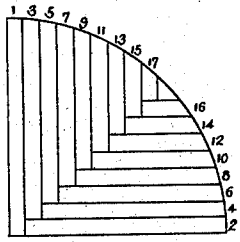


Fig. 5.



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No. 752,701. Patented February 23, 1904.

UNITED STATES PATENT OFFICE.

CHARLES A. NORLIN, OF ORVISBURG, MISSISSIPPI.

SAW-TABLE GAGE.

SPECIFICATION forming part of Letters Patent No. 752,701, dated February 23, 1904.

Application filed October 3, 1903. Serial No. 175,682. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. NORLIN, a citizen of the United States, residing at Orvisburg, in the county of Pearl River and State of Mississippi, have invented a new and useful Saw-Table Gage, of which the following is a specification.

This invention relates to saw-table gages; and the object of the invention is to provide an improved form of gage mechanism for saw-tables by means of which the quarter-sawing of logs may be greatly facilitated.

A further object of the invention is to provide an improved form of saw-table gage for use in quarter-sawing logs which may be instantly thrown into operative or inoperative position, as desired.

With the objects above stated and others in view, which will appear as the invention is more fully disclosed, the same consists in the novel construction and combination of parts of a saw-table gage hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view in longitudinal section through a sawing-machine supplied with the improved saw-table gage, the gage being shown in operative position. Fig. 2 is a view in longitudinal section through the sawing-machine with the gage in inoperative position. Fig. 3 is a view in transverse section through the machine, showing one of the gage members elevated. Fig. 4 is a view similar to Fig. 3, but showing the other gage member elevated. Fig. 5 is a diagrammatic view showing the successive cuts through a log-section in quarter-sawing.

Referring to the drawings, in which corresponding parts are designated by similar characters of reference, 1 designates the table of the sawing-machine, which may be of any suitable structure and which will preferably be mounted upon standards 2 2 of the form shown or any other form adapted to serve as well. The saw 3 is rotatably supported upon a shaft 4, arranged transversely of the table, and will be driven by any suitable means, as by a belt passing over a pulley 5 upon the shaft, power being imparted to the pulley from an engine or motor. (Not shown.) Extending longitudinally of the sawing-machine and beneath the table there is arranged a shaft 6, supported in frames 7, arranged for sliding movement in a vertical direction on the standards 2. The frames 7 rest upon eccentrics 8, rigidly attached to a shaft 9, supported in the standards 2 near the bottom thereof and provided at one end with a crank 10, by means of which the shaft may be turned. The shaft 6 is rotatable in bearings afforded by the frames 7 and has on one end a crank 11 for rocking the shaft for the purpose presently to be explained. Intermediate of its ends the shaft 6 has attached thereto a pair of transverse supporting members 12, each comprising a hub 13, through which the shaft passes, and a pair of diametrically-arranged arms 14, projecting from the hub. The members 12 are rigidly secured upon the shaft 6 in any suitable manner, and consequently when a rocking movement is imparted to the shaft by means of the crank 11 a similar movement will be imparted to the members 12. Each of the arms 14 is provided at the end with an opening to receive a pivot-pin 15, which supports a link 16, and the links 16 are pivotally connected at their upper ends with gage members 17, arranged in ways 18 in the saw-table. The gage members 17 are arranged for sliding movement in the ways 18 and may be raised and lowered alternately, as indicated in Figs. 2 and 3, by merely rocking the shaft 6 in its bearings and changing the position of the arms 14 of the supporting members 12.

The operation of the invention will be easily understood from the description and the drawings, especially Figs. 3 and 4. When the eccentrics 8 are in the position shown in Fig. 1 and the frames 7, in which the shaft 6 is supported, are raised, one of the gage members may always be projected above the top of the table 1, and the position of the crank 11, by which the shaft 6 is rocked, will determine

which of the two gage members is projected above the table and which is lowered below its upper surface.

In quarter-sawing lumber the logs are first cut into sections of the form shown in Fig. 5, and the sections are fed to the saw by any preferred mechanism or by hand. In order to insure uniformity in the thickness of the boards severed by the saw at each cut and to avoid loss of time in setting the gages for the successive cuts, the two gage members 17 are arranged in the ways 18 in the saw-table and means provided for simultaneously raising one of the gage members and lowering the other. Assuming that the first cut is to be made from the section of the log when in the position shown in Fig. 3, the crank 11 will be raised and the gage member 17 on the left of the saw will be projected above the table to the height shown, and at the same time the gage member on the right of the saw will be depressed beneath the upper surface of the table, so as not to interfere with the passage of the log-section over the table. As soon as the cut is complete and the log is turned to the position shown in Fig. 4 for a cut off the other face of the log the crank 11 will be lowered and the position of the gage members changed from that shown in Fig. 3 to that shown in Fig. 4 and the feed of the log to the saw effected in the usual manner.

As the change from one position of the gage members to the other can be brought about by a single short movement of the crank 11 the gages may be adjusted during the return of the log to the front of the machine after each cut, and as soon as the gage members have been brought into position the log may be turned and brought into engagement with the operative member at once. It will thus be apparent that by providing a gage member on each side of the saw and providing means for simultaneously raising one gage member and lowering the other the rate at which logs may be quarter-sawed will be greatly increased and the uniformity of the product insured.

Whenever it is desired to lower both of the gage members below the upper surface of the saw-table, it may be instantly done by merely turning the crank 10 on the shaft 9, so as to depress the eccentrics 8 and allow the frames 7, in which the shaft 6 is journaled, to descend to the position shown in dotted lines in Fig. 1.

While I have described and illustrated the preferred form of embodiment of the invention, it will be obvious that changes in the details of construction may be resorted to without departing from the spirit of the invention or sacrificing its advantages, and the right to make such changes within the scope of the appended claims is reserved.

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

1. The combination with a saw-table and a saw, of a pair of gage members arranged on opposite sides of the saw, and mechanism for alternately raising and lowering said gage members.

2. The combination with a saw-table, of a pair of gage members arranged on opposite sides of the saw, and mechanism for simultaneously raising one of said members and lowering the other.

3. The combination with a saw-table and a saw, of a pair of gage members arranged on opposite sides of the saw, mechanism for simultaneously raising one of said members and lowering the other, and mechanism for simultaneously lowering both of said members.

4. The combination with a saw-table and a saw, of a pair of gage members arranged on opposite sides of the saw, and an oscillatory support for said gage members.

5. The combination with a saw-table and a saw, of a pair of gage members arranged on opposite sides of said saw, an oscillatory support for said gage members, and links connecting said gage members with said support.

6. The combination with a saw-table and a saw, of a shaft disposed longitudinally beneath said table, diametrically-arranged supporting-arms carried by said shaft, links pivotally connected with said arms, and a pair of gage members arranged on opposite sides of said saw and pivotally connected with said links.

7. The combination with a saw-table, of vertically-movable supporting members arranged beneath said table, a shaft journaled in said supporting members, diametrically-arranged supporting-arms projecting from said shaft, a pair of gage members arranged on opposite sides of said saw and supported by said arms, and means for raising and lowering said supporting members.

8. The combination with a saw-table and a saw, of a shaft arranged longitudinally beneath said table, a pair of eccentrics mounted on said shaft near the ends, a pair of vertically-movable supporting-frames raised upon said eccentrics, a shaft journaled in said supporting-frames, diametrically-arranged arms projecting from the last-mentioned shaft, and a pair of gage members arranged on opposite sides of the saw and supported by said arms.

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

CHARLES A. NORLIN.

Witnesses:
A. EVANS, Jr.,
L. P. HOSKINS.