No. 794,432. PATENTED JULY 11, 1905.

O. A. SOWERS.

STAVE JOINTER.

APPLICATION FILED JUNE 7, 1904.

2 SHEETS—SHEET 1.

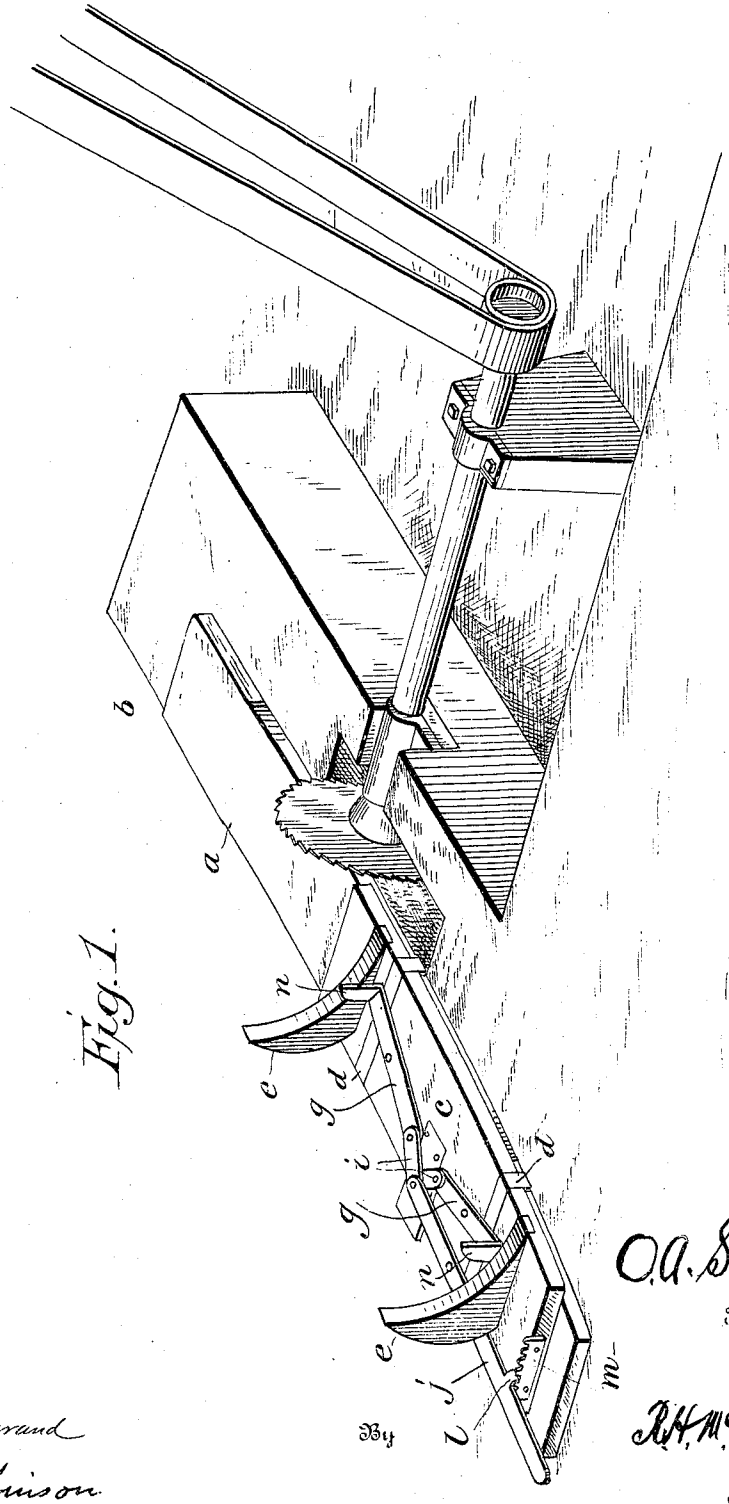


Fig. 1.

Witnesses
Franck L. Orrand
M. J. Robinson

Inventor
O. A. Sowers

By
R. H. McNeill,
Attorney

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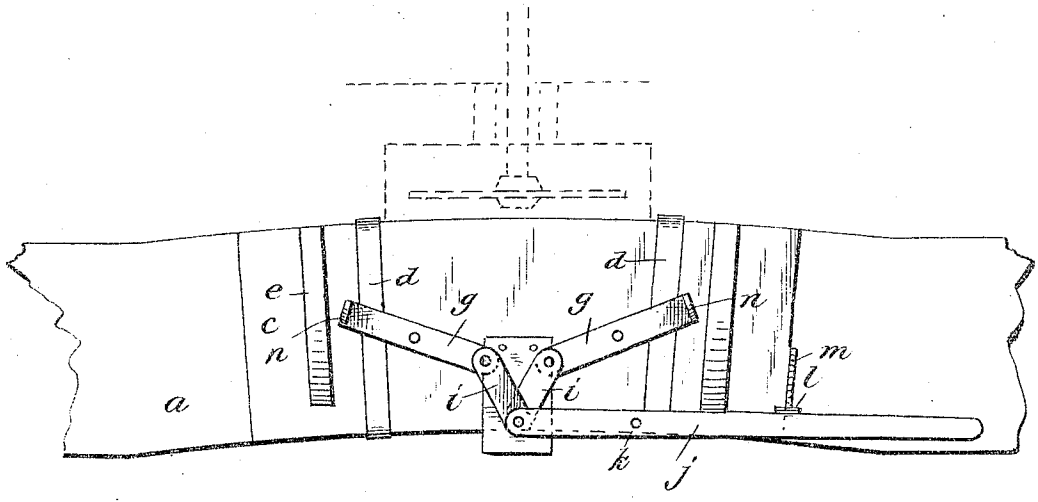


Fig. 2

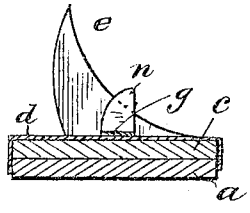


Fig. 3

O. A. Sowers

Inventor

Witnesses

Franck L. Orrand.

M. J. Robinson

By

R. H. McKee

Attorney

PHOTO LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK

No. 794,432. Patented July 11, 1905.

UNITED STATES PATENT OFFICE.

ONI ABNER SOWERS, OF STATESVILLE, NORTH CAROLINA.

STAVE-JOINTER.

SPECIFICATION forming part of Letters Patent No 794,432, dated July 11, 1905.

Application filed June 7, 1904. Serial No. 211,507.

To all whom it may concern:

Be it known that I, ONI ABNER SOWERS, a citizen of the United States, residing at Statesville, in the county of Iredell and State of North Carolina, have invented new and useful Improvements in Stave-Jointers, of which the following is a specification.

This invention has relation to "stave-jointers," so called, which are devices for trimming or dressing the strips called "staves," which compose the sides of a barrel, cask, tub, or the like, so as that it may be closely or tightly joined to the others in the formation of an article of the kind mentioned.

The particular class or type of stave-jointers with which my invention is concerned are those shown in Letters Patent of the United States, granted March 18, 1890, No. 423,498.

It is the object of these improvements to reorganize the construction of the improvements shown, described, and claimed in the said Letters Patent, enhance the utility of the same by changing and extending its range of work, and rendering it safer and more convenient of use, all as will more clearly appear from the description hereinafter given, reference being had to the annexed drawings, and to the letters of reference marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur. The said prior invention was limited to the dressing or trimming of staves having the form of the segment of a circle, while the present improvements are so changed in construction and arranged to operate upon various forms of staves, particularly staves for the formation of barrels or casks cylindrical in form for a limited distance from their ends inward and bulging at the centers, barrels of this construction being for many reasons more desirable than those first described. Again, the former invention was more or less dangerous, in that the means for securing the arms or levers in any position to which they might be adjusted had to be operated from the center of the carriage, while in the present case they are operated entirely from one end of the carriage and out of the way of all danger. Moreover, with the present invention when the stave-gaging devices are once arranged in desired position they can be locked in said position and so maintained by the side lever until the projecting edges of one side of a lot of staves are dressed.

Of the said drawings, Figure 1 is a perspective view of my stave-jointer shown as mounted upon a saw-table. Fig. 2 is a plan of the same. Fig. 3 is a vertical transverse sectional view of Fig. 1.

Some of the instrumentalities are employed in the present case as in the said former patent. They are, however, modified in construction and mode of operation to secure the improved ends mentioned. A circular saw is the trimming means, and a track is employed on a saw-table, whereby the carriage upon which the stave is mounted is guided.

The track consists of a strip *a* of the form of a stave, as hereinbefore stated, which strip is suitably secured to the saw-table *b*. In the present instance the carriage consists of a platform *c*, across which there extends flat thin strips *d*, turned down at their ends and overlapping the edges of the track, whereby the carriage is guided in its movements. This is a valuable addition to and improvement upon the construction of the said former patent. The platform of the carriage is provided on its upper side with a pair of brackets *e e*, as in the said former patent, adapted to support the stave to be operated upon, and it has at the rear end a block *f*, against which the rear end of the stave may abut, so as to prevent the longitudinal displacement during the operation. Upon the upper side of the platform of the carriage are mounted a pair of levers *g g*, the outer ends of which have upturned ends *n n* and the inner ends of which are pivoted to the upper ends of links *i i*, the lower ends of which links are pivoted by a common pivot to the inner end of a lever *j*, fulcrumed a short distance outward from its inner end, as at *k*, the free end of the lever *j* extending beyond the carriage and having its downward-turned edge *l* adapted to engage the rack-teeth *m*, formed on the strip *n'*, connected with the end of the carriage.

By moving the free end of the lever *j* inward or outward the upturned ends of levers

g will be brought toward or from the plane of the saw.

In use the levers g g will be adjusted by means of the lever j and the connecting-links to the width of the stave which is to be operated upon, said stave being supported in position upon the brackets e, with its inner edge resting against the upturned ends n of the levers g. By moving the carriage upon the track, upon which it will be guided and which it will follow, as explained, the edge will be trimmed off the stave, which latter will then be reversed and the operation repeated, so as to trim the other edge.

It will be noted that the parts are operated to gage the stave in position by the projecting end of the lever j, outside of the brackets e e, and that the said lever j whenever desired may be locked or secured in position by engaging its downturned edge l with the teeth m on the strip n, secured to the end of the carriage, as shown.

What I claim is—

1. The combination, with the carriage having the curved brackets on the upper side, of the pivoted levers having upturned outer ends, links connecting the inner ends of said levers by a common pivot to the inner end of a lever having its outer end extending beyond the rear end of the carriage and means for retaining such lever in adjusted position.

2. The combination, with the carriage having the curved brackets on the upper side, of the pivoted levers having upturned outer ends, links connecting the inner ends of said levers by a common pivot to the inner end of a lever, having its outer end extending beyond the rear end of the carriage, said extension having a downward-turned edge, and a rack-strip on the end of the carriage, the teeth of which are adapted to be engaged by said downward-turned edge.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ONI ABNER SOWERS.

Witnesses:
L. C. WAGNER,
A. M. LITAKER.