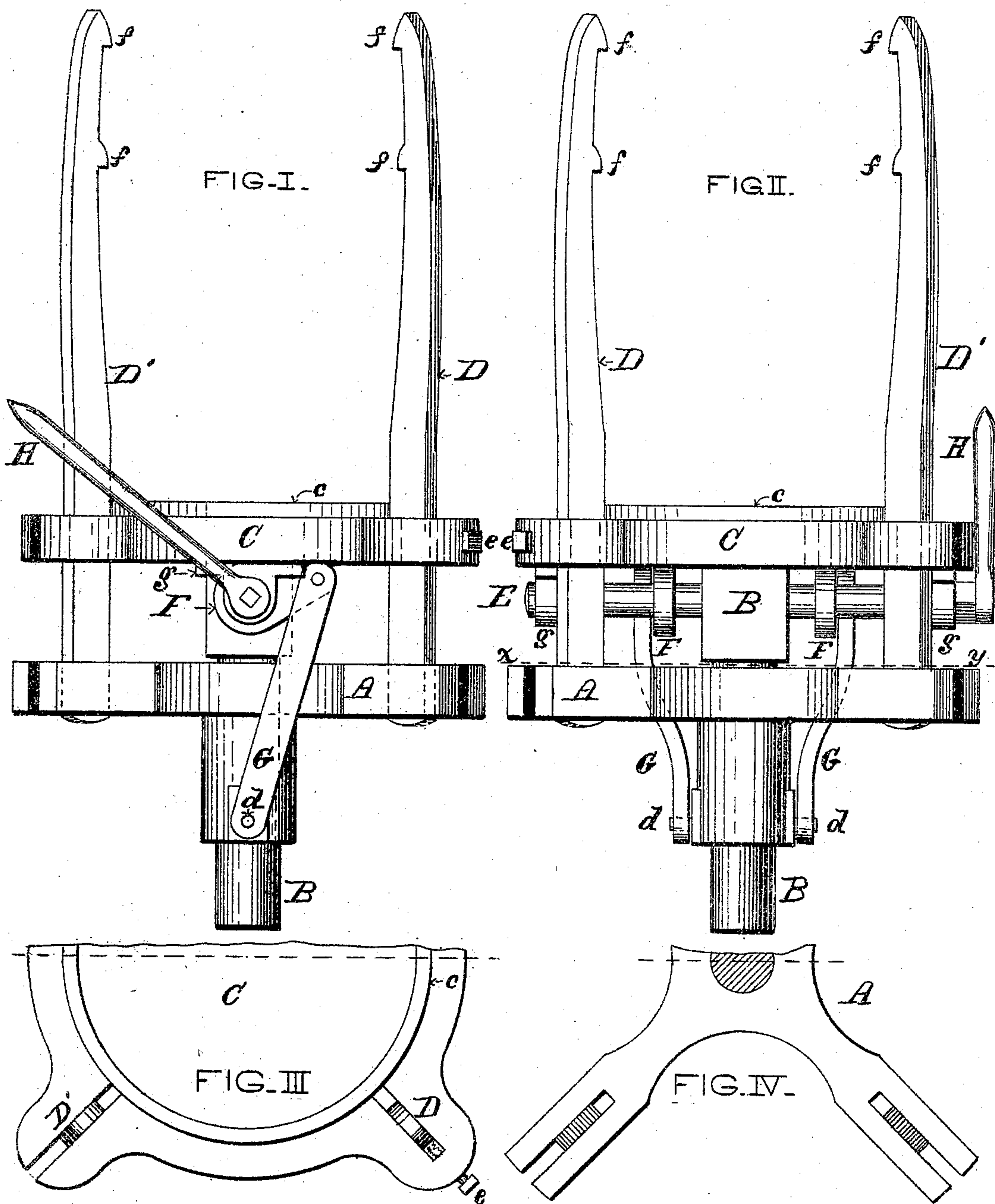


J. SOLTER.

Improvement in Trussing-Machines.

No. 130,669.

Patented Aug 20, 1872.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN SOLTER, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN TRUSSING-MACHINES.

Specification forming part of Letters Patent No. 130,669, dated August 20, 1872.

To all whom it may concern:

Be it known that I, JOHN SOLTER, of the city of Baltimore and State of Maryland, have invented certain Improvements in Barrel Machinery, of which the following is a specification; and I do hereby declare that the same is a full, clear, and exact description of my said invention, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to a machine for the purpose of drawing the temporary or "truss" hoops to their position upon the barrel, at the same time leveling, plumbing, and imparting to the same a rotundity and uniformity in shape necessary to its completion by other machinery not herein described.

These results I effect mainly by constructing my machine in such a manner that the stroke or power exerted in fitting the truss-hoops to the barrel is limited to a fixed length of movement, and also by using, instead of flexible and non-rigid trussing-arms, arms which are adapted to be fixed at a desired distance from the center of the machine and barrel to be operated upon, and which only require to be moved radially in and out to suit the respective sizes of barrels to be trussed.

In the accompanying drawing forming a part of this specification, and in which similar letters refer to similar parts in all the figures, Figure 1 is a front elevation of my trussing-machine. Fig. 2 is a side elevation of the same. Fig. 3 is a half plan of the same. Fig. 4 is a half transverse section of the same upon line *x y*.

A is a cross-head, having a hub at its center of sufficient length to accurately guide the vertical shaft B. A table, C, rests upon the upper end of the shaft. An annular projection upon the upper surface of the table is represented by *c*. The cross-head A is provided with slots in the ends of each of the arms wherein the trussing-bars D and D' are inserted. The upper portion of the shaft B is squared and perforated, the horizontal shaft E passing through it and moving therein. The bearings for the shaft are represented by *g*. At either side of the shaft B and attached to the shaft E is a crank, F, of such length as will give the necessary movement

to the parts of the machine to be operated by it. The cranks are connected to the lower end of the vertical shaft B by rods G vibrating upon the pins *d*. The trussing-bars D pass through slots in the table C corresponding to those in the cross-head A, and are adjusted to suit the size of the barrel by means of the set-screws *e*.

When the bars D D' have been properly adjusted to take the size of the barrel they can be conveniently chocked where they connect with the cross-head A, in order that they may be prevented from falling in or out, which, were they allowed to do so, would destroy the value of the machine in the plumbing and uniform shaping of the barrel. The projections *f* upon the inner edges of the trussing-bars D D' are designed to rest upon and hold the trussing-hoops during the operation hereinafter described. The slot through which the bar D' passes differs from the other in that it extends to the outer edge of the table C to allow the bar to be moved out when necessary.

The lever or handle, by means of which the machine herein shown (a hand-power machine) is operated, is represented by H. If steam or other non-hand power were to be applied, the driving-pulley would be placed upon the same shaft, E, to which the lever is now attached.

The mode or operation of trussing barrels by my machine, as herein shown, is as follows: The handle or lever H is placed in the position shown, and the bar D' withdrawn from its slot in the table C. The barrel is then placed upon the table C and the bar D' replaced. The lever H is moved to the right, the projections *f* resting upon the hoops; and, as the distance between the projections *f* and the table C is shortened, the hoops are forced to their places upon the barrel. As the trussing-bars D D' during this process are rigid and immovable, it follows that the barrel is plumbed; and, as the stroke is limited and equally directed upon all the trussing-bars, it also results that the trussing-hoops must be drawn into parallel lines, occasioning correct and uniform rotundity to the bilge as well as to the ends of the barrel. As soon as the cranks have passed the lowest point described

by them a retrograde movement occurs, and the barrel is released. It is then taken out and reversed, and the same operation repeated, when the process is complete.

This machine is preferably used in trussing what are known to the trade as "slack" barrels, but can be used in treating barrels of other descriptions.

Having thus fully described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

The cross-head A, from which extend the trussing-bars D D', in combination with the

table C g and shaft B, the said cross-head and table being connected by means of the shaft E, cranks F, and links G, the whole when arranged substantially in the manner herein set forth, for the purposes specified.

In testimony that I claim the foregoing as my invention I have hereto set my hand this 16th day of May, A. D. 1872, in the presence of two subscribing witnesses.

JOHN SOLTER.

Witnesses:

WILLIAM T. HOWARD,
O. GEO. DEEVER.