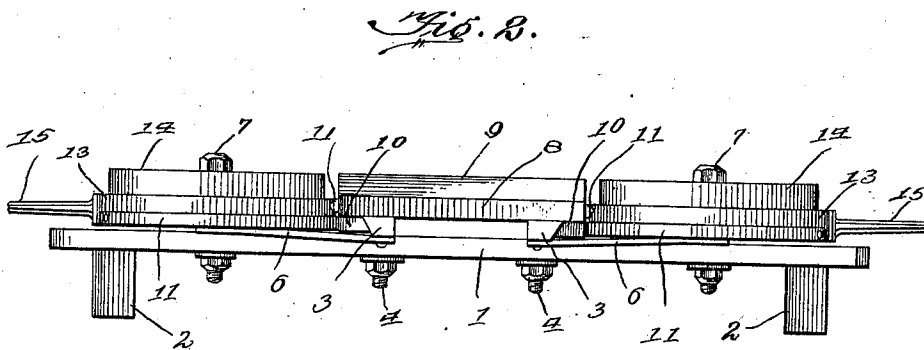
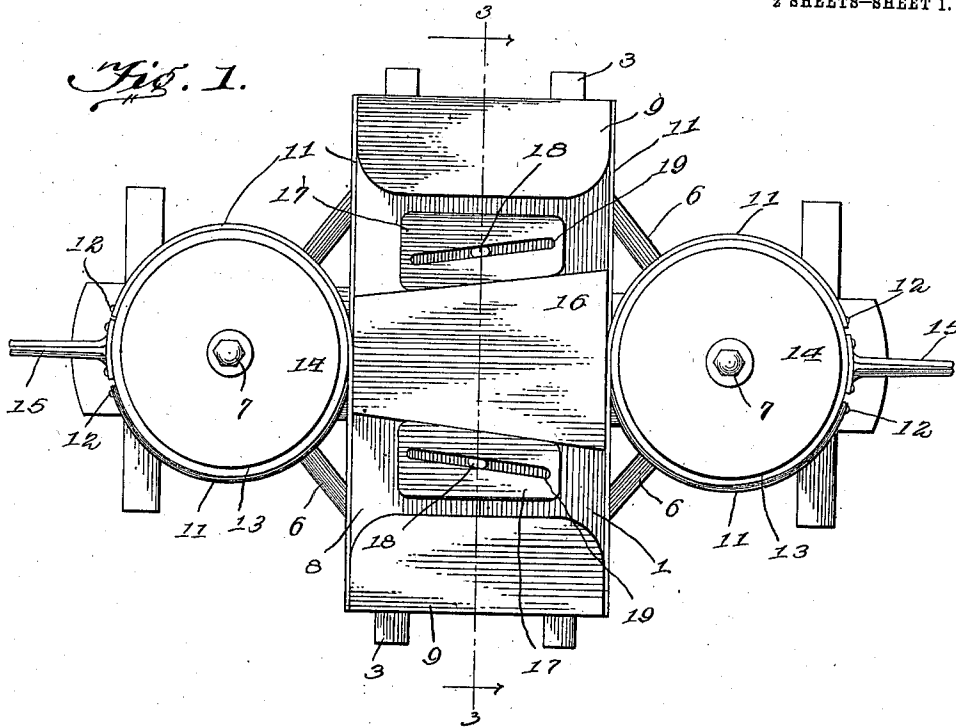


M. D. SMITH.
BENDING MACHINE.
APPLICATION FILED SEPT. 15, 1910.

996,152.

Patented June 27, 1911.

2 SHEETS-SHEET 1.



Inventor

Witnesses

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Edw. W. Smith

Milton D. Smith,
By *Victor J. Evans,*
Attorney

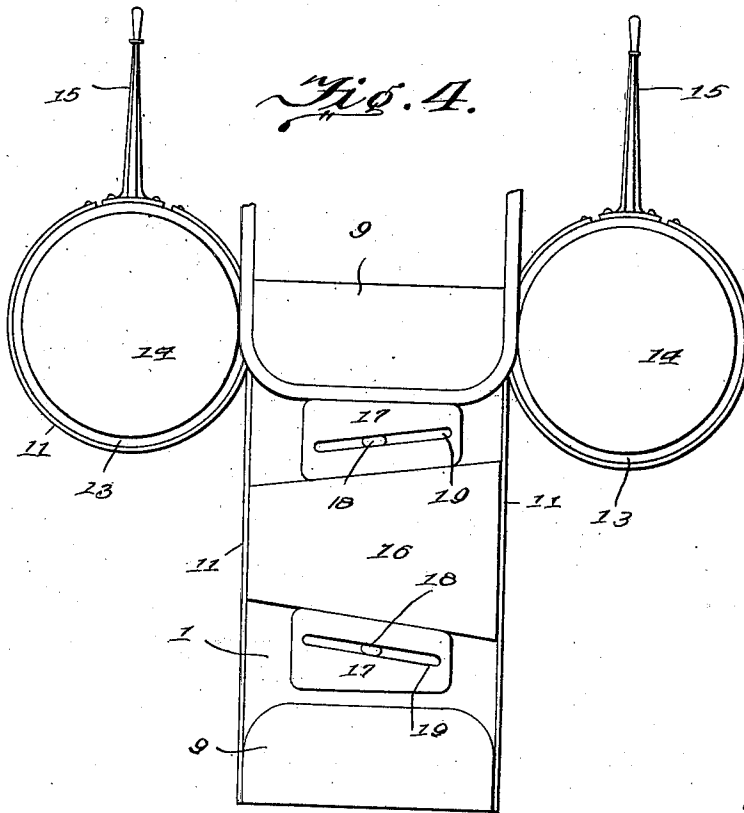
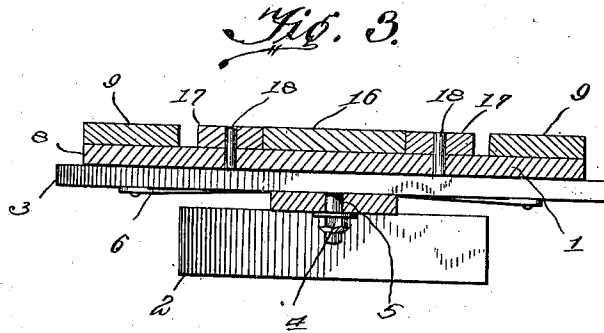
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UNITED STATES PATENT OFFICE.

MILTON D. SMITH, OF SILER CITY, NORTH CAROLINA.

BENDING-MACHINE.

996,152.

Specification of Letters Patent. Patented June 27, 1911.

Application filed September 15, 1910. Serial No. 582,245.

To all whom it may concern:

Be it known that I, MILTON D. SMITH, a citizen of the United States, residing at Siler City, in the county of Chatham and State of North Carolina, have invented new and useful Improvements in Bending-Machines, of which the following is a specification.

This invention relates to bending machines and more particularly to wood bending machines of the type adapted to form buggy bows, wheel rims, wash board frames, chair backs and the like.

The object of the invention is the provision of a simple, efficient and durable double-acting bending machine which may be readily operated and which holds the material to be operated upon firmly in position.

A further object of the invention is the provision of a machine of this character which may be adjusted for work of different sizes and characters and in which a piece of work may be operated upon to bend the same in the operation of releasing another piece which has already been bent.

Further objects of the invention will appear as the following specific description is read in connection with the accompanying drawing which forms a part of this application, and in which:

Figure 1 is a top plan view. Fig. 2 is a side elevation. Fig. 3 is a detail sectional view on the line 3—3 of Fig. 1. Fig. 4 is a detail top plan view with parts omitted showing a buggy bow in clamped position.

Referring more particularly to the drawings 1 represents a suitable base board which is supported in elevated position upon legs 2 arranged at opposite ends thereof. Mounted upon the base board and extending transversely thereof are undercut guiding strips 3 which are adjustably secured to the base board by means of the bolts 4 which are carried by the guiding strips and pass through a longitudinal slot 5 formed in the base board. These strips are suitably braced by means of the V-shaped struts 6 which are secured in adjusted position at their apex by a through bolt 7 which also passes through the slot 5.

Mounted upon the top of the guiding strips and adapted to slide thereover is a work carriage 8 having suitable forms 9 secured to its opposite ends. The bottom of the work table has secured thereto the beveled strips 10 which are adapted to engage the undercut portion of the guiding strips 3

and hold the table in alinement thereon. To the opposite ends of the work frame on either side thereof are secured the flexible bands 11 which are connected at their opposite ends as at 12 to the operating disks 13 journaled upon the bolts 7 and having superimposed thereon the work engaging disks 14 which are adapted to travel with the disks 13 and bend the work around the forms as the carriage is reciprocated. These disks and the disks 13 are operated by suitable levers 15 and when the disks 13 are turned upon their axes the carriage is reciprocated upon the guiding strip 3 in a direction opposite to the movement of the lever. As both sides of the carriage are connected to the disks it will readily be seen that the operation of either one of the disks in either direction will cause a similar operation of the opposite disks.

The upper face of the carriage has secured thereon guide members 16 and mounted to slide transversely across the carriage between the guide members 16 and the forms 9 are wedges 17 which run against the guide members 16 and are adapted to clamp the work against the forms. In order to keep the wedges from becoming disengaged suitable headed studs 18 are projected from the carriage to engage longitudinal slots 19 in the wedges.

Considerably wider or narrower carriages may be utilized by adjusting the guide strips 3 and the braces 6 upon the base plate and as the disks are journaled upon the bolt which holds the struts or braces to the base plate, the disks will be moved inwardly or outwardly in accordance with the adjustment of the guiding strips.

The operation of the device is clearly shown in Fig. 4 and therefore needs no further description.

Having thus described the invention, what is claimed is—

1. A device of the class described comprising a support, guide members mounted upon said support, a work carriage reciprocally mounted over the support on said guiding means, a bending die on said carriage, means for operating said carriage, means for simultaneously adjusting the guiding members and the carriage operating means and means controlled by the operation of the die and coacting with the bending die to bend a bow strip.

2. A device of the class described com-

prising a slotted support, guiding members
mounted upon the support, a work carriage
slidably mounted upon the guide members, a
bending die on said carriage, means for
5 bracing said guide members, disks journaled
upon the support, an operating connection
between the disk and the work carriage,
means for adjusting the disks simultane-
ously with the adjustment of the guiding
10 members and means controlled in the opera-
tion of the disks and coacting with said die
to bend a bow strip.

3. A device of the class described com-
prising a support, guiding members mount-
15 ed thereon, a work carriage mounted on the
guiding members, a bending die on said car-

riage, a disk adjustably mounted upon the
support, braces between the disk and the
guiding members for causing simultaneous
adjustment of the disks and the guiding 20
members, means interconnecting the disk
and work carriage whereby upon rotation
of the disk the work table will be reciprocated upon the guiding members and means 25
controlled in the operation of the disk and
coacting with said die to bend a bow strip.

In testimony whereof I affix my signature
in presence of two witnesses.

MILTON D. SMITH.

Witnesses:

K. A. BUCKNER,
Go. F. PICKARD.

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