

No. 811,593.

PATENTED FEB. 6, 1906.

W. H. STOUT.
CYLINDRICAL BOX TRIMMER.
APPLICATION FILED JUNE 9, 1905.

2 SHEETS—SHEET 1.

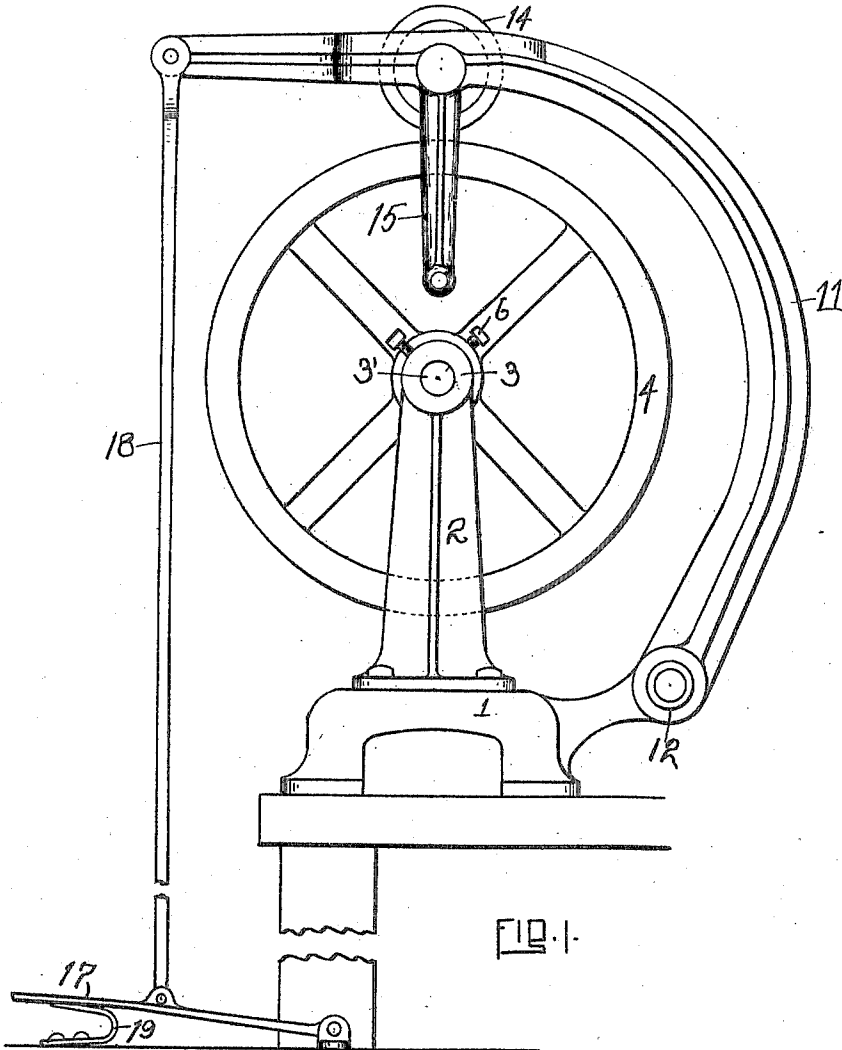


FIG. 1.

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WITNESSES
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J. M. Siebler

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W. H. Stout
ATTORNEY

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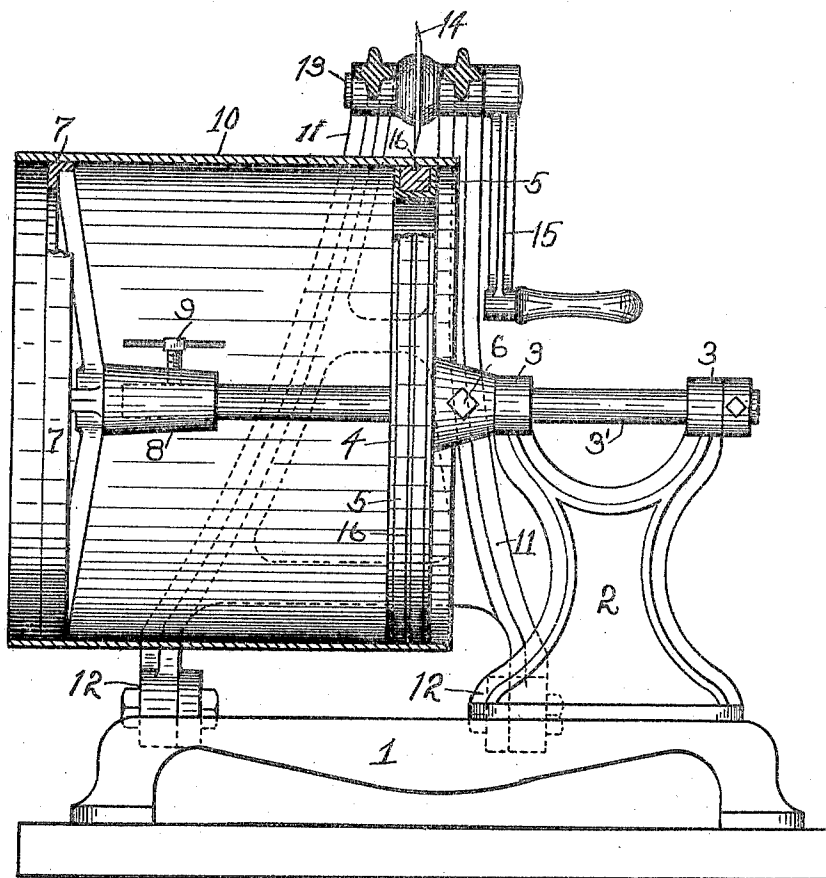


FIG. 2.

WITNESSES
J. Fred Hamburger.
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UNITED STATES PATENT OFFICE.

WILLIAM HENRY STOUT, OF DAYTON, OHIO.

CYLINDRICAL-BOX TRIMMER.

No. 811,593.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed June 9, 1905. Serial No. 264,393.

To all whom it may concern:

Be it known that I, WILLIAM HENRY STOUT, a citizen of the Dominion of Canada, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Cylindrical-Box Trimmers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to a machine for trimming tops of cylindrical boxes made of veneering. These boxes when they come from the machine are all of uniform height, but owing to the different thicknesses of the cheese in actual use the boxes have to be trimmed to suit the height or thickness of the cheese contained therein.

It is therefore the object of the invention to provide a machine that will trim the boxes in a proper manner and with the necessary accuracy.

Preceding a detail description of my invention, reference is made to the accompanying drawings, of which—

Figure 1 is an end elevation of my improved box-trimmer. Fig. 2 is a front elevation showing the blank wheels upon which the box is supported and revolves in section.

In a detail description of the invention similar reference characters indicate corresponding parts.

1 designates a metallic base of suitable proportions and which may be supported upon a suitable platform or table.

2 is a standard having bearings 3 which support a revolving spindle 3'. Located upon this spindle and turning therewith is a blank wheel 4, which has a spiral groove which receives a wooden rim 5, which will be again referred to. This wheel 4 is adjustable along the spindle 3' by means of a set-screw 6, which penetrates the hub of said wheel. On the other end of said spindle there is located an adjustable blank wheel 7 of the diameter of the wheel 4. This wheel 7 has a hub 8, which receives a set-screw 9 and by means of which the position of said wheel is regulated or adjusted to the proper positions or for the proper height of boxes.

10 designates a cylindrical box which is supported upon the blank wheels 4 and 7, the

wheel 7 being at one end and the wheel 4 at the other end.

11 designates a swinging frame which is hinged at two points 12 to the base 1 and converges in a suitable manner to support a mandrel 13 at its free end. This frame, it will be noted, has a suitable curvature to clear the boxes in the operations of trimming. The mandrel 13 supports a revolving cutter 14, and at one end of said mandrel is rigidly secured a hand-crank 15, by means of which the cutter is revolved at the proper time.

From Fig. 2 it will be noted that the cutter 14 is in position in an alinement with the wooden rim 5 of the blank wheel 4 in order that when said cutter penetrates the material of the box it will not come in contact with any of the metal of the wheel, but will engage with the wooden rim 5, and thus will be protected. From Fig. 2 it will be noted that there is a groove 16 in the wooden rim into which the cutter enters when it has penetrated the material of the box. It will also be seen that the upper end of the swinging frame 11 extends forwardly above the wheels and is at that point connected to a foot-treadle 17 by an intervening rod 18, said foot-treadle having a spring 19, which elevates the swinging frame after each operation. The foot-lever 17 may be fulcrumed at any suitable point on the floor below the base 1.

Having described the structural features of the machine, I will now briefly detail the operation of the same. This machine, it may be here stated, is intended for cheese-factories where it becomes necessary to trim the boxes to the desired height of cheese for the reasons hereinbefore stated. The machine is prepared for operation by adjusting the blank wheel 7 to the desired position in accordance with the depth of box. The blank wheel 4 remains stationary in so far as any adjustment is concerned. The box-cylinder 10 is then placed in position over both wheels, as shown in Figs. 1 and 2, and is held in such position by the hand at one end. The swinging frame 11 is then lowered by placing the foot upon the treadle 17. This operation brings the cutter 14 through the cylinder. The hand-crank 15 is then operated to revolve said cutter, and during such revolutions of the cutter the frictional contact with the box-cylinder causes said box-cylinder to rotate with the wheels 4 and 7. In the meantime the cutter is penetrating the cylinder throughout its circumference and in a true

line. After one complete revolution of the box-cylinder is made the end is trimmed and the box is removed from the machine and another one replaced for the same operation.

5 Having described my invention, I claim—

1. In a cylindrical-box trimmer, the combination of a spindle having blank wheels thereon which support the box-cylinder, one of said wheels being adjustable to accommodate different depths of boxes, a swinging frame supporting a cutter, means for lowering said frame to bring the cutter in an operative position, and means for revolving the cutter while held in such position.

15 2. In a cylindrical-box trimmer, a spindle having bearings at one end, blank wheels on said spindle on one side of the bearings, one of said blank wheels being adjustable, and the other of said blank wheels having an embedded wooden rim, a swinging frame supporting a cutter, said cutter being in alignment with the wheel having the wooden rim, means for holding the swinging frame in an

operative position for the cutter, and means for operating the cutter while the frame is so held, said cutter in its revolutions rotating the box-cylinder. 25

3. In a cylindrical-box trimmer, the combination with a spindle supported at one end on a standard, means upon said spindle for supporting a box to be trimmed, a swinging frame having its lower end hinged to the base, said swinging frame having a suitable curvature to clear the box, and the upper end of said swinging frame projecting forwardly, a foot-treadle connected to said upper end whereby the said frame may be lowered in its position, a revolving cutter supported in said frame in a position above the box, and means for revolving said cutter to trim the box. 30 35 40

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

WILLIAM HENRY STOUT.

Witnesses:

R. J. McCARTY,
C. M. THEOBALD.