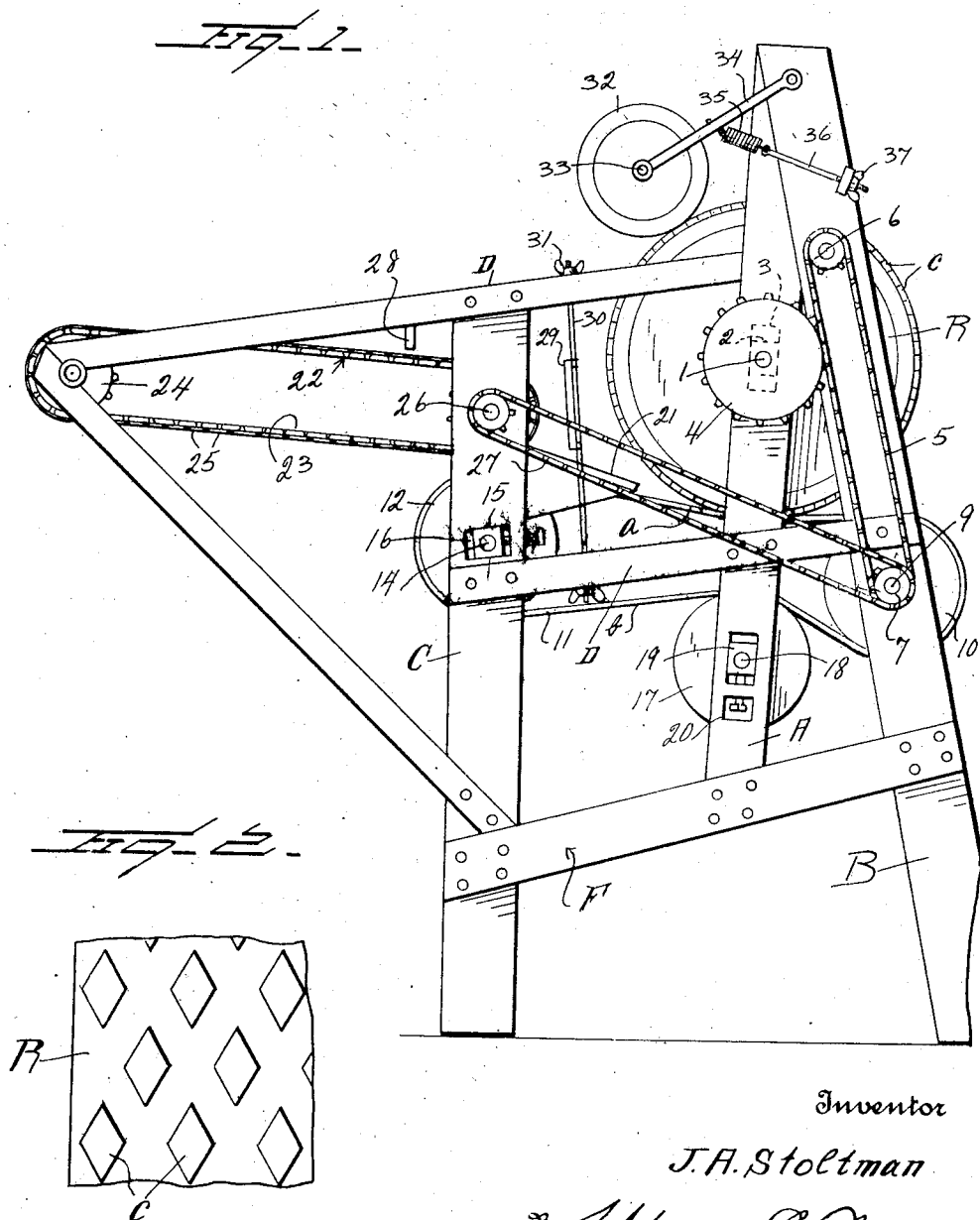


1,348,330.

J. A. STOLTMAN.
PRINTING MACHINE.
APPLICATION FILED MAY 24, 1919.

Patented Aug. 3, 1920.
2 SHEETS—SHEET 1.



Inventor

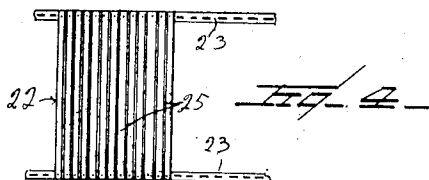
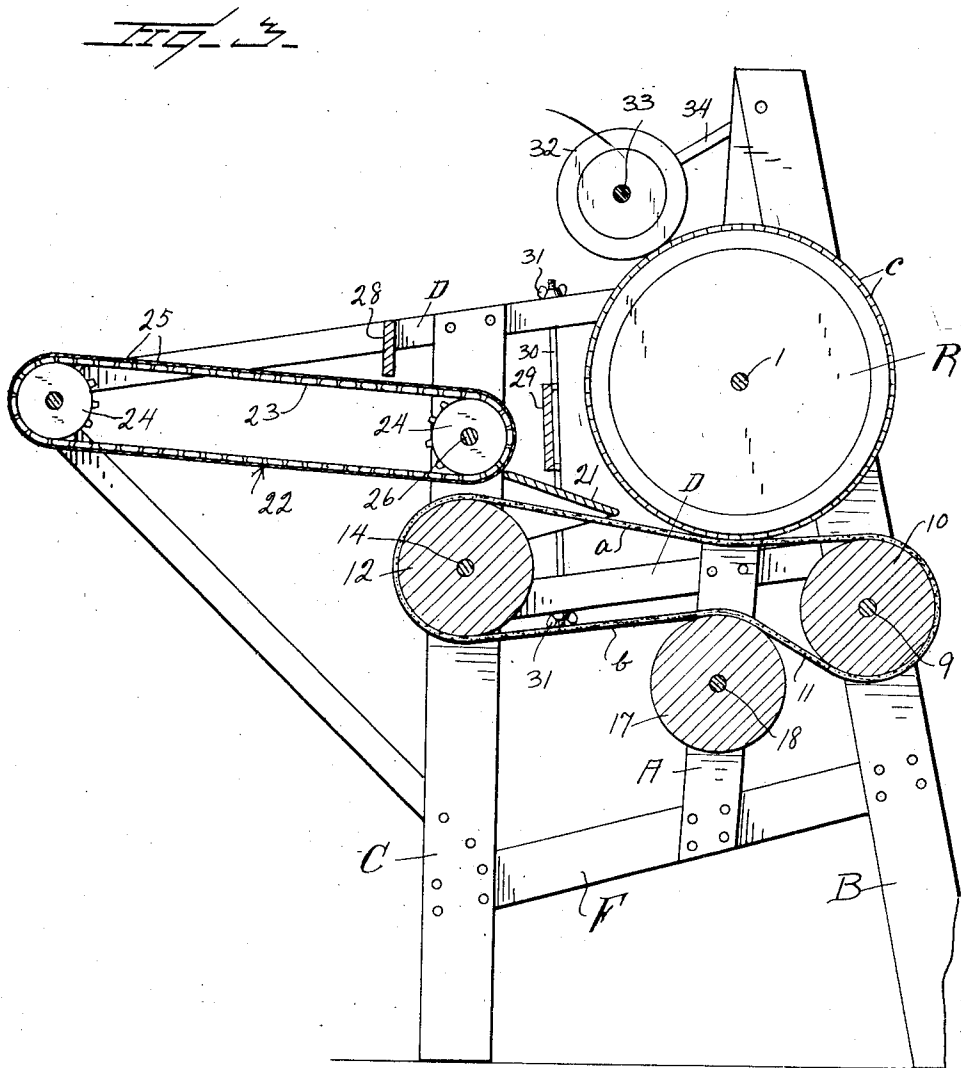
J. A. Stoltman

By *Watson E. Coleman*
Attorney

J. A. STOLTMAN.
 PRINTING MACHINE.
 APPLICATION FILED MAY 24, 1919.

1,348,330.

Patented Aug. 3, 1920.
 2 SHEETS—SHEET 2.



Inventor
 J. A. Stoltman
 By *Watson E. Coleman*
 Attorney

UNITED STATES PATENT OFFICE.

JOHN AUG. STOLTMAN, OF MINTO, NORTH DAKOTA.

PRINTING-MACHINE.

1,348,330.

Specification of Letters Patent.

Patented Aug. 3, 1920.

Application filed May 24, 1919. Serial No. 299,482.

To all whom it may concern:

Be it known that I, JOHN A. STOLTMAN, a citizen of the United States, residing at Minto, in the county of Walsh and State of North Dakota, have invented certain new and useful Improvements in Printing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in printing machines, and it is an object of the invention to provide a novel and improved device of this general character especially designed and adapted for use in printing upon lignified epicarps, such as the shells of walnuts and other edible nuts.

Another object of the invention is to provide a novel and improved device of this general character operating in a manner to produce on the shell of an edible nut or the like a suitable symbol whereby its source of origin as particularly relates to production and distribution may be readily determined.

An additional object of the invention is to provide a novel and improved machine of this general character including a driven printing cylinder coacting with a conveyer for the work and which conveyer operates as a bed, together with means whereby the work may be effectively and conveniently distributed upon the conveyer or bed.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved printing machine whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in side elevation of a printing machine constructed in accordance with an embodiment of my invention.

Fig. 2 is an enlarged fragmentary view of the printing surface of a stamping roller.

Fig. 3 is a view, partly in side elevation and partly in vertical section of the device as herein embodied, and

Fig. 4 is a fragmentary view in top plan of the feeding apron as herein embodied.

As disclosed in the accompanying drawings, my improved machine comprises a frame F including the vertically disposed and transversely spaced sills A between which is rotatably supported the stamping roller R. The stamping roller R includes an axle 1 extending beyond the opposite end thereof and engaged within the bearing blocks 2. The blocks 2 are arranged within the vertically directed slots 3 produced in the sills A, whereby the stamping roller R may be adjusted as the occasions of practice may require.

An end portion of the shaft 1 has fixed thereto a sprocket wheel 4 with which is engaged a chain 5. The chain 5 is directed around the vertically spaced sprockets 6 and 7 rotatably supported by a second sill B. The sprocket 7 is fixed to the shaft 9 of the driving roller 10 for the endless conveyer or bed 11. The stamping roller R may be driven in any desired manner.

The roller 10 is rotatably supported between the transversely spaced sills B and slightly in advance of the lower bight of the roller R so that the upper stretch *a* of the conveyer or bed 11 will have proper coöperation with the roller R.

The conveyer or bed 11 is substantially horizontally disposed and has its rear portion directed around a second roller 12 rotatably supported between a transversely spaced pair of sills C. The roller 12 is fixed to a shaft 14 engaged with the bearing blocks 15 adjustably arranged within the substantially horizontally directed slots 16 produced in the sills C, so that said roller 12 may be adjusted toward or from the roller 10 as the occasions of practice may require and particularly when it is necessary to effect a tightening of the conveyer or bed 11.

I also find it of advantage to have the lower stretch *b* of the conveyer or bed 11 to pass over a tensioning roller 17 supported between the sills A. The tensioning roller 17 is fixed to a shaft 18 having each of its end portions engaged with a bearing block 19 adjustable within a vertically disposed slot 20 produced in the adjacent sill A.

The periphery of the stamping roller R is preferably of soft rubber with the type *c* carried thereby of a similar material and raised thereabove. In practice, I find it of advantage to have the type raised about one-half inch so that the same may effectively engage the work. Each of the type *c* may

be of any character desired, but it is the purpose of my invention that such type constitute a symbol which will readily determine the origin of the goods stamped thereby and so that the consumer will know the brand of the goods.

Overlying the receiving or rear end portion of the upper stretch *a* of the conveyer or bed 11 is a delivery table 21 disposed on a desired forward incline and upon which discharges the upper stretch of the endless feeding apron 22. As herein disclosed, the apron 22 comprises a pair of endless side chains 23 passing around suitably supported sprockets 24 carried by the frame F. The side chains 23 are connected by the cross straps or cleats 25 arranged in close proximity one to the other but which serve to carry the nuts or similar work deposited upon the upper stretch of the apron 22 to the table 21.

The sprockets 24 are arranged in transversely spaced pairs with the sprockets of each pair fixed to a shaft 26 and the forward shaft 26 is operatively connected, as at 27, with the shaft 9, although, if desired, the apron 22 may be driven in any other manner although the present arrangement is preferred.

Disposed across and above the upper stretch of the apron 22 and adjacent its discharge end is a check board 28 which operates to effect an even distribution of the nuts or the like upon the apron 22 and to prevent a too rapid discharge of the nuts upon the table 21.

I also find it of importance to dispose above the table 21 a check board 29 for the same purposes as has just been set forth relative to the check board 28. It is preferred, however, that the check board 29 be vertically adjustable and for which reason the opposite end portions thereof are secured to the vertically disposed rods 30 having their opposite end portions loosely directed through the substantially horizontally disposed sills D. Engaged with the opposite end portions of said rods 30 and coacting with the sills D are the wing nuts 31 or the like which, upon proper manipulation, permit the desired raising or lowering of the check board 29.

Coacting with the periphery of the stamping roller R is an inking roll 32 having the shaft 33 thereof rotatably supported by the vertically swinging arms 34. The arms 34 are pivotally engaged with the upper portion of the frame F and coacting with one of said arms 34 is a retractile member 35 whereby the inking roll 32 is constantly urged toward and maintained in contact with the working face or periphery of the stamping roller R. This mounting of the inking roller offers no hindrance or obstruction to the desired vertical adjustment of the stamping roller R.

As herein disclosed, the retractile member 35 comprises a coil spring having one end portion suitably secured to an arm 34 and its opposite end portion secured to a rod 36 slidably disposed through the upper portion of the frame F, or more particularly a sill B, and engaged with the forward end portion of said rod 36 is a wing nut 37 or the like. This nut 37 coacts with the sill B so that upon requisite rotation thereof, the tension of the retractile member 34 may be regulated in accordance with the requirements of practice.

The nuts or the like deposited upon the upper stretch of the apron 22 are carried forwardly and deposited upon the table 21 and pass from the table 21 to the upper stretch *a* of the conveyer or bed 11. The upper stretch *a* of the conveyer or bed 11 carries the nuts beneath the stamping roller R so that a suitable impression is produced thereon. The nuts as discharged from the conveyer or bed 11 may be received in suitable receptacles or otherwise collected.

The speed of travel of the conveyer or bed 11 may be as desired. Under some conditions, it is preferred that the speed of travel of the conveyer or bed 11 be less than the peripheral speed of the roller R in order to effect the desired printing on the work, although under other conditions the conveyer or bed 11 may travel at the same speed or at a greater speed than the peripheral speed of said roller. The rate of speed of the conveyer or bed 11 will be best determined by the diameter of the sprocket wheel 4.

From the foregoing description, it is thought to be obvious that a printing machine constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

1. A machine of the class described comprising a printing member, an endless bed coacting with the printing member, means for moving said bed, an apron discharging upon the bed, a feed member discharging upon the apron, vertically adjustable rods supported at opposite sides of the apron in advance of the feed member, and a check board connected to said rods and extending across the apron and vertically spaced therefrom.

2. A machine of the class described com-

prising an endless bed, a rotary printing member mounted above the bed, and normally in contact with a stretch of the bed, said printing member having movement toward or from the bed, a sprocket for rotating the printing member and having movement therewith toward or from the bed, an endless chain arranged at one side of the sprocket and having a stretch engaged with the sprocket, and means for moving the chain.

3. A machine of the class described comprising an endless bed, a rotary printing member mounted above the bed, and normally in contact with a stretch of the bed,

said printing member having movement toward or from the bed, a sprocket for rotating the printing member and having movement therewith toward or from the bed, an endless chain arranged at one side of the sprocket and having a stretch engaged with the sprocket, and means for moving the chain, said means also moving the bed.

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

JOHN AUG. STOLTMAN.

Witnesses:

ADAM E. KIEDROWSKI,
LOUIS W. WISNIEWSKI.