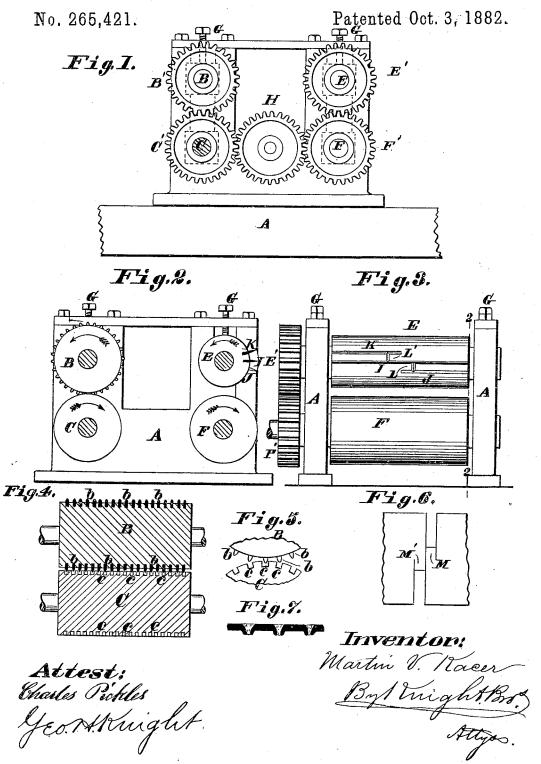
M. V. KACER.

MACHINE FOR MAKING BOTTLE WRAPPERS.



UNITED STATES PATENT OFFICE.

MARTIN V. KAČER, OF ST. LOUIS, MISSOURI.

MACHINE FOR MAKING BOTTLE-WRAPPERS.

SPECIFICATION forming part of Letters Patent No. 265,421, dated October 3, 1882.

Application filed February 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, MARTIN V. KAČER, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Machines for Making Bottle-Wrappers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a machine for perforating paper for the purpose of making projections thereon, and for cutting the same into the bottle-wrappers secured by my Letters Patent No. 234,582, granted 16th November, 1880.

My invention consists in combining with two rollers supported in a suitable frame for perforating paper-board two others for cutting the paper-board, when it is to be used for bottle-wrappers, into the proper sizes for that purpose, and also for forming the locking-tongues, as hereinafter set forth.

In the drawings, Figure 1 is an end elevation, showing the gearing for driving the rolls. Fig. 2 is a vertical section on line 2 2, Fig. 3.

Fig. 3 is a rear elevation, showing the rolls for cutting off the wrappers and forming the tongues. Fig. 4 is a longitudinal section through the perforating rollers, and Fig. 5 is a detail end view of same. Fig. 6 shows a portion of a wrapper illustrating the locking-tongues, and showing them in their unlocked position. Fig. 7 is a detail section of a wrapper.

A represents the frame of the machine, which supports in suitable boxes the perforatingrollers B C and cutting-rollers E F. The boxes of the rollers B and E are capable of a slight vertical movement in the frame, so that any thickness of paper-board may be passed through the rollers, the cogs of the driving-wheels being sufficiently long to allow of this adjustment without being disengaged.

G G are set-screws in the top of the frame, whose lower ends bear against the boxes of the rolls B and E to hold the rollers down.

B' C' are the cog-wheels on the perforatingrollers and E' F' the cog-wheels on the cutting-rollers. The wheels C' and F' are con-

nected by a similar cog-wheel, H, supported in a suitable box secured to the frame. The power is applied to either of the rollers, but 50 preferably to roller C.

The roller B is provided with blunt-pointed projections or pins b, and the roller C has corresponding holes or indentations, c, for receiving the ends of the pins. The holes c are made 55 somewhat larger and deeper than the pins, so that as the pins perforate the paper a portion of it will be forced down into the holes, which forms the bushy projections on the wrapper or material. The pins and holes are in spiral 60 rows around the rollers B and C.

The roller F is a plain metal roller. The roller E has five knives, I, J, K, and L L'. The knife I extends all the way across the roller, and the knives J K extend from each 65 end, respectively, of the roller to the center on opposite sides and a small distance from the knife I. L L' are transverse knives connecting the knives J K with knife I back a piece from the center of the roller. (See Fig. 3.) As 70 the material passes through between these rollers the knives J L first form the tongue M, (see Fig. 6,) then the knife I cuts the section off, and the knives K L' cut the tongue M'. The knives are held in grooves in the roller. When 75 it is desired to perforate the material only the knives can be removed. It will be seen that the knives are made sufficient in width to allow the rollers to be some distance apart, so that they will not press upon the material as 80 it passes between them, and thus in a measure destroy the projections. The size of the roller E is made to vary according to the size into which the wrappers are to be cut.

I claim as my invention—
In combination with rollers B C, having pius b and holes c, the rollers E F, the former having knives I J K L L', supported in frame A, and having a suitable driving-connection, substantially as and for the purpose set forth. 90 MARTIN V. KAČER.

Witnesses:
SAML. KNIGHT,
GEO. H. KNIGHT.