means for rotating the same, the cones K, having notched flanges 26 upon the ends of the cones, and constructed to overlap the ends of the staves, a stave-holding box, E, located above the notched portions of the flanges, and means, substantially as described, whereby said box can be raised and lowered, as set forth.

6. The combination of the stave-feeder, the opposite disks J J′, the flanges 26, projecting over the disks so as to retain staves carried thereby, each flange comprising a lower longitudinally-movable half and an upper fixed half notched for the passage of the staves, and mechanism, substantially as described, for rotating the disks and for retracting the same and the lower halves of the flanges, as set forth.

7. The combination of the opposite disks J J′, situated within the cones K K, with the swinging frame G and disks *c c*, and with mechanism for advancing and retracting said disks, as set forth.

8. The combination, in a barrel-forming machine, of the disks J J′, constructed to receive the staves, the shafts or sleeves I, carrying said disks, gearing connecting said shafts or sleeves, the ratchet-wheel *m* on one of the shafts or sleeves, the rocking frame L, operated continuously, and having a pawl engaging with the ratchet-wheel, the ratchet-locking wheel $n'$, and the locking-lever $n^2$, constructed as described, whereby it trips the pawl and throws the same out of gear on dropping into position to lock the wheel $n'$, as set forth.

9. The combination of the disks J J′ and their shafts I, the pivoted arms C, connected thereto, the longitudinally-movable screw-sleeves $s'$ $s'$, means for connecting one sleeve to one arm and the other to the opposite arm, devices for rotating the sleeves, wheels gearing into said sleeves, and mechanism for locking and releasing said wheels, as set forth.

10. The combination of the disks J J′, the shafts I, the arms C, connected thereto, the longitudinally-movable screw-sleeves $s'$ $s'$, connected one to one arm and the other to the opposite arm, devices for rotating said sleeves, wheels *v*, gearing into the sleeves, ratchets $v^2$ on said wheels, pawl-levers *z*, adapted to the ratchets, and a wedge-block, *w*, adapted to act upon said levers, as set forth.

11. The combination of the disks J J′, the shafts I, the arms C, connected thereto, the longitudinally-movable screw-sleeves $s'$ $s'$, connected one to one arm and the other to the opposite arm, devices for rotating said sleeves, the wheels *v*, gearing into the sleeves, the ratchets $v^2$ on said wheels, the pawls *z*, adapted to the ratchets, the wedge-block *w*, acting on the pawls, the balance-lever W, controlling said wedge-block, and having a movable weight, *x*, the operating-treadle X, constructed to tilt said lever, the weighted lever Y, adapted to reverse the same, the block U, adapted to fit between the sleeves $s'$ $s'$, and having a pin for acting on the lever Y, and the restoring-lever Z, constructed to depress the block U, as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

MARIA E. BEASLEY.
EMIL M. HUGENTOBLER.

Witnesses:
HARRY L. ASHENFELTER,
HENRY HOWSON, Jr.