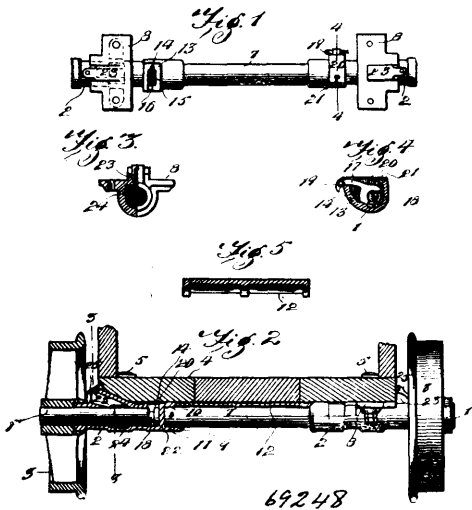


the central connection and designed to have car wheels fixed to them, and locking devices for retaining the axle sections in the



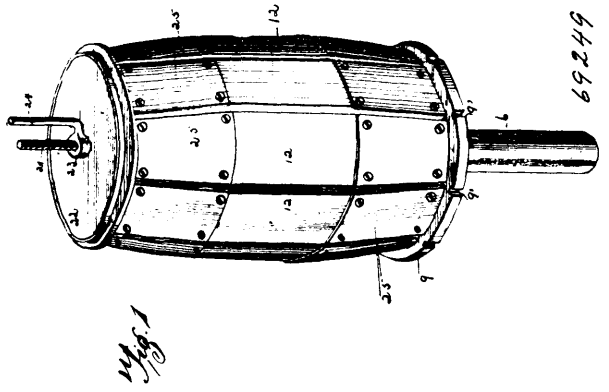
bearing sleeves, substantially as described. 3rd. In a device of the class described, the combination with a car, of bearing sleeves arranged at opposite sides thereof, the short axle sections arranged in the bearing sleeves and designed to have car wheels fixed to them, and the locking devices securing the axle sections in the sleeves, and arranged at the sides of the latter, whereby the axle sections may be released and removed without unloading the car or separating the latter from the train, or removing the sleeve from the car, substantially as described. 4th. In a device of the class described, the combination of a car, of bearing sleeves arranged at opposite sides of the car and provided with laterally disposed enlargements forming interior chambers, the latter being open at the top and provided with side slots, axle sections arranged within the sleeves, spaced apart and designed to have car wheels secured to them, and the locking devices or keys arranged within the bearing sleeves at the enlargements thereof, engaging the axle sections and provided with shanks extending through the said slots, said locking devices being adapted to be operated from the sides of the sleeves without removing them therefrom, substantially as described. 5th. In a device of the class described, the combination of bearing sleeves designed to be located at opposite sides of a car, the short axle sections spaced apart and arranged in the bearing sleeves, locking devices arranged at the sides of the sleeves and having shanks extending through the same, said locking devices engaging the axle sections, and keys retaining the locking devices in engagement with the axle sections, substantially as described. 6th. In a device of the class described, the combination of bearing sleeves designed to be arranged at opposite sides of a car and provided with laterally disposed enlargements having openings at the top and slots at the sides, the short axle sections arranged in the bearing sleeves, covers secured to the bearing sleeves and arranged over the openings of the enlargements, and locking devices engaging the axle sections and provided with shanks extending through the said slots and secured to the covers, substantially as described. 7th. In a device of the class described, the combination of bearing sleeves designed to be located at opposite sides of a car, the short axle sections arranged within the bearing sleeves and designed to have car wheels fixed to them, abutting devices located within the sleeves and arranged to receive the inner ends of the axle sections, whereby the outer ends of the sleeves and the inner ends of the hubs of the wheels are relieved of the friction resulting from the side thrusts of the bar, the independent spacing piece connecting the bearing sleeves and located between the abutting devices and means for securing the axle sections in the sleeves, substantially as described.

**No. 60,249. Barrel Forming Machine.**  
(Machine à façonner les barils.)

William M. Schoolfield, Pocomoke, Maryland, U. S. A., 6th November, 1900; 6 years. (Filed 19th October, 1900.)

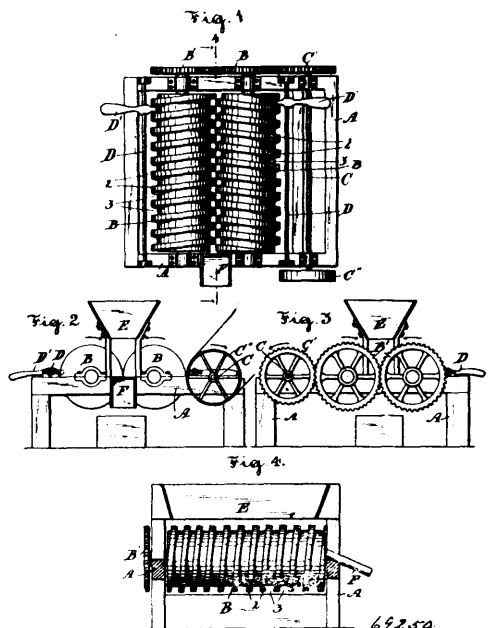
**Claim.**—1st. A barrel form comprising a spindle, staves connected with the spindle for bodily pivotal movement toward and away from the spindle, means for moving the staves upon their pivots, a block upon the spindle having guide grooves, and projections upon the staves engaging the grooves for movement therethrough to prevent lateral displacement of the staves. 2nd. A barrel form comprising a spindle having a wedge block thereon, staves hinged to the spindle for bodily movement toward and away from the spindle, said staves lying against the block, and means for moving the staves longitudinally against the wedge block to press them out

wardly. 3rd. A barrel form comprising a spindle having a wedge block thereon and provided with guide grooves, staves hinged to



the spindle for movement toward and away from the spindle and resting with their ends against the block, projections on the staves engaging the guide grooves, and means for moving the staves longitudinally against the wedge block to force the staves outwardly. 4th. A barrel form comprising a spindle having a wedge block thereon provided with longitudinal guide grooves, staves, plates hinged at their ends to the staves and to the spindle, whereby the staves may be moved bodily and pivotally towards and away from the spindle, a screw extension of the spindle, a clamping plate upon the screw for engagement with the staves to move them longitudinally against the wedge block to expand the form, a nut engaged with the screw to operate the plate, and projections upon the staves engaging the guide grooves to hold the staves from lateral displacement. 5th. A barrel form comprising a spindle, a plurality of staves hinged to the spindle for bodily and pivotal movement towards and away from the spindle, and staves having their outer faces flattened between their ends, and means for moving the staves pivotally and longitudinally to expand the form. 6th. A barrel form comprising a spindle, a plurality of staves pivotally connected with the spindle for movement toward and away from the spindle and provided with clenching plates, a clamping plate having means for moving it against the staves to move them pivotally and a second plate provided with indicating means to indicate the interspaces between the staves.

**No. 69,250. Clay Pulverizer and Stone Separator.**  
(Pulvérisateur de glaise et séparateur de pierre.)



James Elliott, Wingham, Ontario, Canada, 6th November, 1900; 6 years. (Filed 15th May, 1899.)

**Claim.**—1st. In a clay pulverizer and cleaner, rollers rotating in contact with each other and having their surfaces broken up by