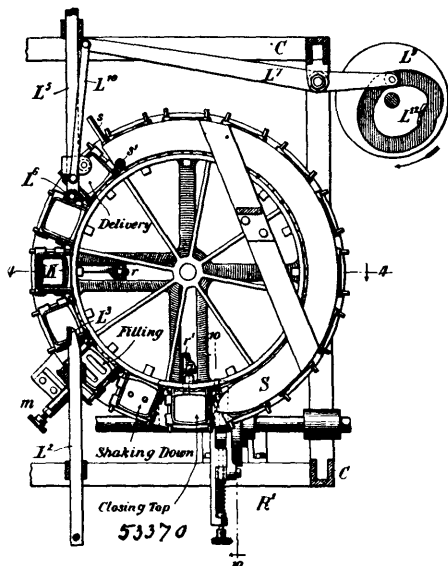


Claim.—1st. The combination with a base, a universally movable frame, twin yokes pivotally attached to said base and frame, and clamping screws in the extremities of the yokes of an interconnecting joint comprising a ball, a split socket having a sectional tubular stem, and a clamping device, adapted to cause the socket to clasp the ball on one yoke, and the stem to engage the opposite corresponding yoke, substantially as stated. 2nd. In combination with two similar yokes, a separable joint uniting the same, and comprising a ball secured to one yoke, a stud transversely on the corresponding yoke, a split socket having an exteriorly threaded stem, and a clamping nut which serves to clasp the socket about the ball and socket stem about the stud, substantially as described.

No. 53,370. Package Making and Filling Machinery.

(*Machine à faire des paquets et les remplir.*)

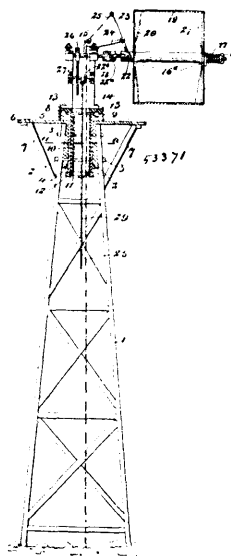


Henry Eyster Smyser, Germantown, Philadelphia, Pennsylvania, U.S.A., 1st September, 1896; 6 years. (Filed 13th August, 1896.)

Claim.—1st. In a bag-forming mechanism, the combination, with a former and means for wrapping a sheet of paper around the former to form it into a tube, of the improved means for uniting the pasted seam, consisting of a roller and a cam for operating it, adapted to cause it to roll across the face of the former to form the seam and again back and forth across the face of the former and over the pasted seam without passing off the former, in substantially the manner specified, whereby the seam is more firmly united. 2nd. In a bag-forming mechanism, a former, and a matrix for wrapping a sheet of paper around three sides of the former preparatory to its formation into a tube, the former being sufficiently shorter than the sheet of paper to leave sufficient of the paper tube projecting beneath it to be folded in to form the bottom of the bag, combined with a movable wall constituting a temporary downward continuation of the former during the instant that the paper is being folded around the former, and means for displacing it preparatory to the folding in of the bottom. 3rd. The combination with a former K and matrix G, of a vertically moveable wall *t* adapted to slide up within the former, and mechanism for moving it adapted to hold it projected beneath the former during the time that the matrix is folding a sheet around the former, and subsequently to lift it within the former. 4th. The combination with a former K and matrix G, and plunger O¹ working within the former, of a wall *t* applied to said plunger, and a cam O² for operating the plunger, formed with a dwell *t*¹ for causing the plunger to rest beneath the former during the instant that the paper is being folded by the matrix around the former. 5th. In a packaging machine, the combination with one of a series of pockets having a movable wall *q*¹ guided by sliding pins *q*², of a tension device consisting of a spring *u* applied to said pocket and pressing against such pin, and means for adjusting the tension of said spring. 6th. In a packaging machine, the combination with a package-holding pocket having a movable wall, of a device for contracting the pocket, consisting of a movable part moving to push in said wall, and a spring interposed between said parts and said movable wall and through which the thrust is communicated in order that the pocket in contracting upon the package shall embrace it yieldingly, and thereby adapt itself to variations in the bulk of the packages. 7th. In a packaging machine, the combination with a pocket having a movable wall, of a device for contracting the pocket consisting of a lever *r*¹, link R², lever R² and cam R¹, and a spring *r* interposed

between the lever R² and lever *r*¹, and through which spring the thrust is transmitted from the former to the latter, whereby the contractile thrust exerted by the latter lever against the pocket is rendered yielding.

No. 53,371. Windmill. (*Moulin à vent.*)



Jacob L. Rust and Franklin M. Rust, Grant Toup, all of Gladstone, Illinois, U.S.A., 2nd September, 1896; 6 years. (Filed 12th August, 1896.)

Claim.—1st. In a windmill, the combination of a base piece, a shaft mounted to turn thereon and adapted to swing in a horizontal plane, a wind wheel mounted on said shaft and provided with a clutch member at one end, a clutch member connected to the shaft, a spring arranged to hold the clutch member on the wind wheel normally engaged with the clutch member on the shaft, means for moving said clutch members out of engagement, and gearing connected to said shaft, substantially as set forth. 2nd. In a wind mill, the combination of a base piece, a shaft mounted to turn thereon, a wind wheel mounted on and capable of longitudinal movement on the shaft and provided at one end with a clutch member, a clutch member connected to the shaft and adapted to be engaged by the clutch member on the wind wheel, a spring coiled on the shaft and arranged to bear against the end of the wind wheel opposite to that end at which is arranged the clutch member, a nut screwing on said shaft and arranged to engage said spring to adjust the tension thereof, means for moving the clutch members out of engagement, and gearing connected to said shaft, substantially as set forth. 3rd. In a wind mill, the combination of a base ring adapted to turn in a horizontal plane, standards extending up from opposite sides thereof, a shaft journaled in the upper ends of said standards and having one end extending beyond one side of the base ring, a wind wheel mounted on the projecting end of the shaft and capable of longitudinal movement thereon, a spring coiled on the extremity of the shaft and arranged to engage the outer end of the wheel, a nut screwing on the end of the shaft and adapted to control said spring, a clutch member formed on the opposite end of the wind wheel, a clutch member secured to the shaft to be engaged by the clutch member on the wind wheel and adapted when operated, to move the same endwise on the shaft to disengage the clutch members, and gearing connected to said shaft, substantially as set forth.

No. 53,372. Bicycle Crank shaft.

(*Essieu pour bielles de bicycles.*)

The Lackawanna Wheel Company, assignee of Frank C. Holmes, all of Scranton, Pennsylvania, U.S.A., 2nd September, 1896; 6 years. (Filed 10th August, 1896.)

Claim.—1st. In a bicycle the combination of a crank and crank shaft, said crank shaft having a flattened tapered end, and a second crank, fitted detachably on the flat tapered end of the crank shaft, so that the end of shaft comes flush with face of crank, with a long sleeve closely fitted to and surrounding the crank shaft and having oppositely screw-threaded ends fitted into sockets on back of the cranks whereby the cranks are firmly held on the crank shaft, all substantially as and for the purpose described. 2nd. In a bicycle, the combination of the crank shaft having angular ends, and the detachable cranks having sockets in their bosses fitting the ends of the shaft; with a sleeve fitted on the shaft and having oppositely