

O, and P, a shaft Q, with cog barrel or wheels Y, and W, and cam R, 3rd. The combination of the cog wheels O, and P, screw shaft Q, Qi, thread carrier a, b, with split nut engaging the shaft wheels W, and Y, and cam R; 4th. The provision in a spinning machine of a bobbin so arranged that it can be reversed for doubling and twisting.

No. 5269. EDWARD BALKEMA, and HENRY BEUMER, Lafayette, Ind., U. S., 11th October, 1875, for 5 years: "Waggon Axle." (Essieu de wagon.)

*Claim.*—1st. An axle adapted to turn in boxes, combined with a thimble-skein adapted to turn upon the thimble so that there is an independent revolution of the axle and of the traction wheels; 2nd. In combination with an axle, a box in which it is to revolve, and thimble-skeins capable of revolution upon a thimble rigidly attached to said axle.

No. 5270. GEORGE MEACON, Beverly, Mass., U. S., 11th October, 1875, for 5 years: "Catamenial Sack." (Garni.)

*Claim.*—1st. In combination with the outer-sack a, and the inner-sack b, of the rounded edge d, elastic lip e, and porous band or welt f; 2nd. In combination with the outer-sack a, and the inner-sack b, of the central front and rear bands g, h, and the side-bands i, r, k, k, for attachment around the limbs.

No. 5271. ALBRECHT E. BARTHEL, Detroit, Mich., U. S., and WILLIAM SMITH, Toronto, Ont., 11th October, 1875, for 5 years: "Peat Machine." (Machine à tourbe.)

*Claim.*—1st. The process for the preparation of peat for fuel consisting in placing the green-peat within a grinding mill A, from which it falls when ground into a hopper B, leading into a revolving screen C, which separates the fine peat from the coarse substances therein, the former falling through the screen into the buckets of the elevator D, from which it is discharged by the spout E, on to the top drying pan F, within the kiln L, heated by the steam-pipes H, the worms G, revolving within the pan F, convey the peat to its opposite end when it falls over on to the pan beneath and the worms G, therein repeat the operation till the lower pan is reached from whence the peat is propelled into the pressing machine J, by the revolving worm H, the whole arrangement of parts being such that no manual labour is employed from the time that the peat enters the grinding mill A, till it is discharged from the pressing machine J; 2nd. The double bottom pans F, with revolving worms G, arranged one pan above the other within a kiln L, in combination with the steam pipes H, 3rd. Drying peat by passing it through a drying kiln, and pressing it while yet hot into a continuous stream; 4th. The head block p, pivoted on p, in combination with the screw p, for the purpose of contracting the channel j, 5th. The plunger j, having a reciprocating motion in combination with the channel j.

No. 5272. CALVIN L. FISHER, Spring, Pa., U. S., 20th October, 1875, for 5 years: "Improvements in Side-spring Vehicles." (Perfectionnements dans les voitures à ressorts de côté.)

*Claim.*—1st. The elastic braces J, J and K, K, and their application to side-spring vehicles, 2nd. The combination of side-springs E, constructed with a scroll e, on one or both ends with axles A, and B, platform or box H, and elastic self-adjusting braces or reaches J, J, and K, K, 3rd. The platform or box H, and its combination with the elastic braces J, J, and K, K, springs E, and axles A, and B.

No. 5273. ALEXANDER WORSTER, Groveton, N. H., U. S., 20th October, 1875, for 5 years: "Locking Latch." (Loquet-serrure.)

*Claim.*—The combination of a locking bolt provided with two arms D, and H, forming an obtuse angle on the under or lower side, as shown in the drawings, and provided with a pin a, and notch i, the fixed pin d, the spring F, and the latch C, provided with the pin b, and operating on the pivot f, near its centre, together with the semi-circular cam E, operating by means of the usual knob and shaft on the upper rear extremity of the latch C.

No. 5274. WILLIAM F. NEAL, Liberty, Me., U. S., 20th October, 1875, for 5 years: "Horse Hay Rake." (Rateau à cheval.)

*Claim.*—1st. The tooth support bars C, as forked at their front ends, or parts connected with the axle by means of a rod and eye bolts; 2nd. The combination of the bar C, forked at its rear part, with two teeth g, g, (pivoted to the prongs of the fork) and with a duplex brace J, applied to such bar and teeth; 3rd. The combination of the connection bar f, with the swinglo tree G, and the axle A, the said bar being applied thereto and the thills D; 4th. The combination of two or other suitable number of clearers R, R, with the thills D, and the rake head or axle A, provided with the tooth support bars C, 2nd teeth g; 5th. The combination of the slotted adjustable slides c, c, and their clamp screws d, d, with the thills D, and the rake head or axle A, its tooth bars C, and teeth g; 6th. The duplex brace J, provided with the loops j, j, and the eye k, for application to the two teeth g, and their carrying bar C.

No. 5275. AUGUSTUS CORNELL, Bosanquet Ont., 20th October, 1875, for 5 years: "Quilting-frame." (Métier à piquer.)

*Claim.*—1st. The movable bar B, which slides on the rollers A A, 2nd. The hooks attached to the movable bar B, and to the piece C.

No. 5276. GEORGE B. THURBER, Upton Station, Que., 20th October, 1875, for 5 years: "Oscillating Steam Engine." (Machine à vapeur oscillante.)

*Claim.*—1st. A stationary valve D, with waste boxes W, and live steam and exhaust ports E, and Et, and S, having their openings in the concave face of the valve, by means of which live steam is supplied and exhaust steam received from the cylinder, at the proper time by its oscillation, 2nd. A cylinder with a convex face in the form of a segment of a circle, having its centre in common with the supporting trunnions passages a, and b, so arranged that they will receive and exhaust steam at the proper time by the oscillation of the cylinder. Also the lubricating chambers L.

No. 5277. JAMES HARRIMAN, Thorold, Ont., 20th October, 1875, for 5 years: "Tumbling Rod and Coupling Joint Covering." (Chemise de tige à joint universel.)

*Claim.*—1st. The coupling joint covering composed of the cylindrical sections A, D, and F, fitting and held together to form a ball joint casing, 2nd. The ball joint casing having on the outer ends polygonal formed rings G, 3rd. The sectional covering for tumbling rod composed of board H, and polygonal rings I, fitting endwise together.