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INVENTIONS PATENTED.

NOTE-Patents are granted for 15 years. The term of years for which the fee has been paid, is given after the date of the patent.

No. 30,306. Railway. (Chemin de fer,)

Eben M. Boynton, West Newbury, Mass., U.S., 29th November, 1889; 5 years.

1898; 5 years. Claim.—1st. A "bicyclo" railway carriage provided with lower compartments for passengers and luggage, substantially as set forth. 2nd. A "bicyclo" carriage or car provided with a door at the top to receive, and a door at or near the bottom to discharge freight, substantially as set forth. 3rd. A "bicyclo" carriage or car provided with a skelton metal frame for the conveyance of lumber, and other, coarse freight, substantially as set forth.

No. 30,307. Exhaust Nozzle Extension for Locomotives. (Extension de buse d'épuisement pour locomotives.)

Julius T. Lee, Mattoon, Ill., U.S., 1st December, 1888; 5 years.

Julius T. Loe, Mattoon, Ill., U.S., 1st December, 1893: 5 years.

Claim.—1st. The combination, with a locomotive stack and stand pipe, of pipes of varying lengths, movably supported in the stack above the stand pipe, and means for moving the said pipes to cause them to register alternately with the stand pipe, substantially as described. 2nd. The combination, with a locomotive stand pipe, smoke box and smoke stack, of a sories of pipes of various sizes and lengths held to swing in the said smoke stack, and adapted to be connected at their lower ends with the upperend of the said stand pipe, substantially as shown and described. 3rd. The combination, with a locomotive stand pipe, smoke box and smoke stack, of a series of pipes of various sizes and lengths, and secured to each other, said pipes being pived by hangers in, and at the extreme top of said smoke stack, and a rod fastened to the said pipes, and extending to the cab of the locomotive, substantially as shown and described.

No. 30,308. Roller Valve. (Soupape à rouleau.)

Julius T. Lee, Mattoon, Ill., U.S., 1st December, 1888; 5 years.

Julius T. Lee, Mattoon, Ill., U.S., 1st December, 1883; 5 years.

Claim.—1st. In a roller valve, the combination, with a table held in a steam chest and provided with longitudinal strips or tracks, of springs supporting said table, and screw-rods for adjusting said table in the said steam chest, substantially as shown and described. 2nd. In a roller valve, the combination, with a table provided with longitudinal strips or tracks, of springs supporting the under side of said table, vortical rods on which said springs are coiled, said rods also guiding said table, screw-rods screwing into the oglinder, and passing through the steam chest cover, and through the said table, nuts screwing on the outer ends of the said screw-rods, and a collar formed on each screw-rod and resting on top of the said table, substantially as shown and described. 3rd. In a roller valve, the combination, with a cylinder and steam chest, of a table provided with longitudinal strips or tracks, springs on which said table rests, a screw-rod screwing in the cylinder, and passing through the said table, and the steam chest cover, a collar formed on each screw-rod and resting on top of the said table, and a nut having a conical bottom and screwing on the outer end of the said screw-rod, substantially as shown and described. 4th. In a roller valve, the combination, with a steam chest, of a table held adjustably in the said steam chest, and provided with longitudinal strips or tracks, rollers traveling on the said table, a frame in which the said rollers are mounted, taid frame being provided with lugs at each end, and springs held on the inside of the said steam chest, and against which operate said lugs on the roller frame, substantially as shown and described. 5th. In a roller valve, the combination, with a cylinder and steam chest, of a slide valve traveling in the said steam chest, and provided with longitudinal strips or tracks, and springs held on the said steam chest, and springs held on the said steam chest and saapted to be chassed by l

No. 30,309. Toe Weight. (Contre-poids de sabot.)

Charles W. Crannell, Oberlin, Kan., U.S., 1st December, 1888; 5

Claim.—1st. In a too weight, the shank B, the arm b3, perforated wings b5, and the weight C, substantially as specified. 2nd. In a too weight, the shank B, the weight C, the cap plate D, and the winged sleeve b3, all combined and constructed, substantially as set forth. 3rd. In a too weight, the combination, of the shank B, the too weight C, and the cap plate D, all combined substantially as specified.

No. 30,310. Harness. (Harnais.)

Albion V. Tourgée, Mayville, N.Y., U.S., 1st December, 1888; 5 years.

Albion V. Tourgéo, Mayville, N.Y., U.S., 1st December, 1883; 5 years.

Claim.—1st. A metallic harness comprising a collar composed of a two-part and pirotally connected arch-shaped top portion, havingadjustment holes in their lower portions, side bars having similar adjustment holes in their lower portions, pivot pins or bolts connecting the respective sections with capability of vortical adjustment, the one on the other, and a bottom-connecting lock hinged to said side bars, a flexible perforated saddic-tree, flexible saddie and girth, a spring connected to the saddle and having perforations registering with the perforations in the tree, perforated hold-back springs pivotally connected at their front ends to the collar, bolts or torrets connecting said hold-back springs and tree, stay springs pivotally connected at their respective ends to the collar, and hold-back springs, trace or tug fasteners, each composed of a two-part hollow box, one part boing semi-cylindrical to adapt the same to receive either round or flat traces, spring trace supports, an elastic and pliable metallic back-band having a perforated rear portion, a hinged bifurcated reuper having one arm hinged to the back-band to permit of vertical movement, and the outer end joined to portait of vertical movement, abutton for holding the laterally moving arm in locked position, a connecting band or strap removably and adjustably connecting band or strap removably and adjustably connecting said backband and crupper, a flexible metallic breeching, a sectional hip-trap having perforations in its lower ends to permit of its vertically adjustable connection with the becching, a connecting strap baving a button to engage the perforations in the backband, and having privatally connected at their ends respectively to the hip-strap, and breeching traces having longitudinally adjustable connecting a button to engage the perforations in the backband, and having privatally connected to said arch shaped spring top portion, straight lower bars having transversely