in which are fixed the axle shafts of the inking rollers that depend from the said heads, and are pressed toward the said cylinder and type by the springs a acting on said sliding heads; 2nd. The combination of the stationary cylinder K, provided with a planosurface that serves as a bed for the type, the reciprocating platen T, the revolving plate U and a pitman pivoted at one and to the said plate, and at the other end to a crank pin in said plate U, the said plate performing the double office of carrying the inking rollers and communicating motion to the Platen, 3rd. The combination of the cylinder K, provided with a plane surface that serves as a bed for the type, the revolving plate U, the inking rollers carried by said plate, the platen T that carries in its arms I II, the feed rollers D D1 D2 D3 with the perforating apparatus f tur, attached to and carried by said arms; 4th. The combination in a printing press of the cylinder K, provided with a plane surface that serves as a bed plate for the type, the revolving plate U, the king rollers carried by said plate, the plate T, that carries on its arms I I, the feed rollers D D2 D3, with the cutting or shear blades v: ivia stached to und carried by said arms; I I; 5th. The feed inchanism consisting of the arms at, the pawiar, the sliding block V, and all constructed and arranged to be actuated from the crank pin G, in the gear d, whereby an intermittent movement is given the feed roller D, 6th. The cyclet reservoir a manned upon the platform Pitt, constructed and arranged to be lowered and raised by the movement of the platen T, 7th. The combination of the platen T, the lever K1, incline N and punch J1t. the platen T , 7t N and punch J11.

No. 8312. **Process of Manufacturing Wooden** Bottle Stoppers and Bungs. (Procede de fabrication des bouchons de bouteilles et bondons en bois.)

Frank A. Howig, San Francisco. Cal., U.S., 21st January, 1878, for 5 years. Claim.—1st. A new process for heating wood, for making elastic bottle stoppers and bungs, consisting in removing the resinous and gumming matters by treatment with strong alkaline solutions, and then subjecting it to steam or hot water, and subsequent treatment with glycerine and paratine or wax, or their equivalents, 2nd. Elastic wooden bottle stoppers or bungs impervious to liquids and gases, prepared in the manner set forth.

No. 8313. Improvements on Machines for Crimping Leather for Boots and Shoes. (Perfectionnements aux machines à cambrer les cuirs à chaussures.)

Samuel W. Jamison, Brooklyn, N.Y., U.S., 21st January, 1878, for 5 years.

cambrer les cuirs à chauseures.)

Samuel W. Jamison, Brooklyn, N.Y., U.S., 21st January, 1878, for 5 years. Claim.—1st. The combination with a crimping tree, or plate of jaws, for crimping or smoothing the material, arranged in pairs and mounted in trucks movable upon stationary and rigid ways, and mechanism for imparting lateral movements to said jaws toward each other, 2nd. The combination with the movable truck, of a jaw carrying box movable within said truck, 3rd. The combination with the movable truck, of a jaw carrying box, of a right and left hand screw forming the fulcrum of a lever to be operated from without the truck; 4th. The combination with the jaw carrying box, operated to move within and transversely to the path of the truck, by means of a right and left hand screw, of an automatically operated lever to rotate said screw; 5th. The combination with the movable truck on the stationary traine and the jaw operated by a lever, of an adjustable stop-fast to a fixed portion of the trame and actuating the lever within said movable truck, to turn the screw at the proper intervals of time, 6th. The combination with the jaw hung upon a box operated by right and left hand screw and lever, of the automatically shifted weight upon the lever for operation. 7th. The general arrangement of supporting and hanging the jaws, whereby each jaw of any pair of Jaws may adjust itself indep identity of the other with respect to the crimping tree; 8th. The manner of hanging thejaws to the trucks by means of links; 9th The smoothing jaws arranged in opposite pairs, both being attached to their respective trucks by hinge joints, os at to admit of each being tilted upon its lower end. 10th The smoothing jaws arranged in opposite pairs, the one being hinged at its lower end to the truck, while the lower end of the other is hinged to a box movable within their respective trucks, 11th. The combination with the respective trucks by hinge joints, of lovers to operatesaid toggle, for the spreading of the jaws apart; (2th. The comb

No. 8314. Improvements on Photograph Burnishers (Perfectionnements aux brunissoirs des cartes photographiques.)

Joseph P. Bass, (assignee of Emile R. Weston), Bangor, Mc., U.S., 22nd January, 1878 (Extension of Patent No. 1995), for five years.

No. 8315. Improvement on Coats.

(Perfectionnements aux habits.)

John Paret, New York (assignee of Albert P. Silva, Elmira, N. Y.), U. S., 22nd January, 1878 (Re-Issue of Patent No. 7016.)

Claim.—1st. A coa, having a supplementary collar inside of the neck or ordinary collar. 2nd. The inside openings for the reception of the supplementary collar ends, 3rd. A coat constructed with inside openings, the ordinary collar and a supplementary or inner folding collar, the ends of when not in use, are secured in said openings; 4th. A coat sleeves when not in use, are secured in said openings; 4th. A coat sensitive with a mitten connected with or forming an extension thereof, 1th A coat constructed with sleeves provided with folding inities connected with or forming parts of said sleeves. 6th. A coat constructed with a supplementary collar upon the inside of the ordinary collar, and 1titens connected to or forming extensions of the sleeves.

No. 8316. Improvement in Cigars.

(Perfectionnement des cigares.)

Theodore H. Babcock, Brooklyn, N.Y., Francis C. Upton, New York, and Samuel Babcock, Middletown, Ct., U.S., 22nd January, 1878, tor 5

Claim.—lst. A clgar permeated at one end by a composition or material ignitible by friction, 2nd. The method of providing a cigar with an end ignitible by friction, by saturating the said end with a liquid composition which becomes hard when dry, and is ignitible by friction; 2nd. A cigar one end of which is permeated by a composition ignitible by friction only when brought into contact with a specially-prepared frictional surface.

No. 8317. Improvement on Fellies.

(Perfectionnement des jantes de roues.)

William A. Wharton, Belle-Centre, Ohio, U S., 22nd January, 1878, for 5 years.

Claim.—A vehicle wheel, whose fellies are provided with the intermediate detachable blocks B, through which pass the dowel pins.

No. 8318. Improvements in Bottles.

(Perfectionnements dans les bouteilles.)

Stephen S. Newton, Binghamton, N. Y., U. S., 22nd January, 1878, for 5 years.

years.

Claim.— Ist. The combination with the neck of the bottle, of the coned spring scraper; 2nd. The bottle, having its neck contracted, and provided with openings to permit the return of the liquid to the body of the bottle. It has combination with the bottle, of the removable contracted neck or throat; 4th. In combination with the neck or discharge opening of a vessel adapted to contain liquids, a stopper and a stopper support arranged extrally of the opening, and to which the stopper is acrewed; 5th. A stopper support arranged in combination with a stopper which packs or fits chosely both the mouth of the vessel and the stopper support, and prevents the liquid from passing either between the stopper and the mouth of the bottle or between the stopper and the mouth of the bottle or between the stopper and the mouth of the bottle an irregularly-formed inner surface, in combination with a screw-thread thimble, secured by said irregularly formed surface, and a stopper having a screw-thread adapted to engage with the screw-threaded thimble.

No. 8319. Improvements on CareCountlines.

No. 8319. Improvements on Car-Couplings.

(Perfectionnements aux attelages de wagons.)

Amzi Allen and Thomas C. Clark, Marietta, Ohio. U.S., 22nd January, 1872. for 5 years.

Claim .- The combination of the catch bar C, eccentric E, sliding bars 0 and link L.

No. 8320. Improvements in Hay Rakes.

(Perfectionnements aux râteaux à foin.)

Charles A. Massey, Mathew Garvin and William Johnston, New-Caste Ont., 22nd January, 1878, for 5 years.

Claim.—1st. The T headed lever P, attached to the friction band U and passing through the plate B, bolted to the axie-tree A, in combination with the arm E, connected by suitable mechanism to the foot lever L, 2nd The self adjusting S shaped lever F, fitted within the box H and connected to the arms E by the rods G and short chains G; in combination with the chains passing through the roller bracket K, and connected to the foot lever L, by the rod M, or its equivalent, 3rd. The ferule O, fitting within a growe cut at the front of the axle-tree A and holding the bent end n of the teeth N for the purpose of protecting the wooden axie-tree A from wear caused by the motion of the teeth N. Claim .- 1st. The T headed lever P, attached to the friction band C and

No. 8321. Improvement on Slide Valves.

(Perfectionnement des tiroirs de vapeur.)

Henry B Doolittle, Doolittle's Mills, Ind., U.S., 22nd January, 1878 for 5 years.

Claim .- In combination with the bars A A D D D: Dz, the wrist pin tad justable by means of the screw J.

No. 8322. Process of Manufacturing Steel Scraps into Steel Castings. (Proceed pour fabriquer la fonte d'acier avec les reblons.)

Alber. V. Valette and Frederic Dodge, Picton, Ont., 22nd January, 1573, to 5 years.

Claim—1st. The process of manufacturing scrap steel into articles of utility, consisting in reducing scrap steel with charcoal, and a flux in a smt able furnace to a molten state, and then adding to the mass, charcoal. bn= able furnace to a molten state, and then adding to the mass, charcoal, burstone, prussiate of potassa and metallic zinc, and casting the fused mass is moulds to the desired form. 2nd .The process of annealing shapes of stell cast in a mould of the required form, consisting in immersing the same while in a heated state, in a bath of hot soft water containing corrosive, sublimate and prussiate of potassa, and afterwards greasing and heating in a charcoal furnace, or a retort containing charcoal, for a suitable time according to the bulk of the article.

No. 8323. Improvements on Wash-Stands

(Perfectionnements aux lavabos.)

Charles C. Hall, Boston, Mass., and Robert M. Hall, Mont-Clair, N.J., U.S-22nd January, 1878, for 5 years.

Claim .- 1st. The combination, with a casing of suitable height to adapt is