

No. 34,816. Calendar. (Calendrier.)

Louis Palmerston, Milwaukee, Wis., U.S., 5th August, 1890; 5 years.

Claim.—1st. In a calendar, a base plate having two annular spaces drawn thereon, with one hundred subdivisions drawn radially across the said two annular spaces, the subdivisions in one circle or annular space, numbered from "01" to "00," corresponding to the two right hand figures in a century of years, and the corresponding spaces in the other circle or annular space, each containing a digit or cipher, in combination with a superimposed circular plate of lesser diameter also provided with two circles or annular spaces, with forty-one subdivisions marked off radially across said circles, so as to register with the radial divisions on the base card, the subdivisions in one of said circles being numbered consecutively from "0" to "40," and the corresponding spaces in the other circle or annular space, each containing a digit or cipher, another superimposed circular plate of lesser diameter than the foregoing, provided with a single circumferential circle or annular space having thirty-one radial subdivisions marked off registering with the before-named radial subdivisions on the lower plates and numbered from "1" to "31," another superimposed plate of lesser diameter than the foregoing, provided with two circumferential circles or annular spaces, marked across with radial division lines registering with the before-named radial division lines, twelve of the subdivisions, thus formed, in one circle, being marked with the names of the months in regular order, followed by eleven blank subdivisions, succeeded by two marked with the names of the first two months, and the fourteen subdivisions in the other circle on this plate corresponding to the marked divisions just named, each containing a number or digit, and another superimposed plate of lesser diameter than the foregoing, also provided with two circumferential circles or annular spaces, similarly marked across with registering radial division lines, into fifty subdivisions, those in one circle containing the names, initials or numbers of the days of the week, regularly repeated, and those in the other circle numbered from "1" to "50," all of said plates being centrally and pivotally united to each other, substantially as set forth. 2nd. In a calendar, the combination of a series of plates centrally united to a bottom plate to turn one upon the other independently, said plates being of different diameters, with their exposed portions provided with series of figures, numbers, or other marks, for reference and calculation, and having projecting tags or analogous turning devices, substantially as set forth. 3rd. In a calendar, the combination of a series of circular plates centrally united to a bottom plate, to turn one upon the other, the plates above the bottom plate being of diminishing diameters, with a plate interposed between two of said plates, half of this interposed plate being of practically the same diameter or circumferential extension of the plate below it, while its other half corresponds in size and extent to that of the plate above it, the larger portion being provided with a slot or opening in its circumference, and all the circular plates having projecting tags or analogous turning devices, substantially as set forth.

No. 34,817. Blocking Tension. (Mandrin.)

George R. Jeffries, Toronto, Ont., 5th August, 1890; 5 years.

Claim.—A frame, consisting of a series of round stationary bars, arranged parallel with each other, in combination with a round bar horizontally or diagonally adjustable in the said frame, substantially as and for the purpose specified.

No. 34,818. Ladder. (Echelle.)

William G. Sickles, Stryvesant, N. Y., U.S., 5th August, 1890; 5 years.

Claim.—In a ladder, the combination of the extension bar B, movable in a vertical plane in contact with one of the side-pieces of a ladder, said extension bar provided with a series of holes, a presser foot attached to said bar B, having an upper horizontal portion H, and a lower smaller pointed portion C, with a bolt P passing through the side piece A, of the ladder, engaging with the holes in the bar B, said bolt operated by the spiral spring S, placed about the shank of the bolt and secured within the side-piece A, all substantially as described and for the purpose set forth.

No. 34,819. Process of Treating Silver and Zinc Ores. (Procédé de traitement des minerais d'argent et de zinc.)

Frank L. Bartlett, Portland, Me., U.S., 5th August, 1890; 5 years.

Claim.—The herein described process of treating ores containing zinc and silver, which consists in mixing the ore with hydro-carbon fuel, supplying sufficient sulphur to produce an excess of the same, burning in the presence of an air-blast forced uniformly up through the whole mass of ore, and supplying air to unite with the products of combustion above said mass, substantially as shown.

No. 34,820. Process and Apparatus for Manufacturing Pigments. (Procédé et appareil de fabrication des couleurs.)

Frank L. Bartlett, Portland, Me., U.S., 5th August, 1890; 5 years.

Claim.—1st. The herein described apparatus for the manufacture of pigment, consisting of a blast furnace, a passage or flue leading therefrom, an oxidizing furnace provided with means for heating the air supplied thereto in the line of said flue, a mass of refractory material filling said flue between the main furnace and said oxidizing furnace, and having tortuous passages passing through it, and air pipes for supplying air to said oxidizing furnace, blast furnace, and to the flue leading therefrom, substantially as shown. 2nd. The herein described apparatus for the manufacture of pigment, consisting of a blast furnace, a passage or flue leading therefrom, a mass of refractory material in the line of said flue having tortuous passages extending through it for the passage of fume, an oxidizing furnace situated in the line of said flue, a cooling chamber having

numerous small flues for the passage of fume, a collecting and settling chamber, pipes for supplying said cooling chamber with a cooling fluid, and pipes for supplying air to said oxidizing furnace, blast furnace, and the passage leading therefrom, substantially as shown. 3rd. The herein described apparatus for the manufacture of pigment consisting of a blast furnace, a passage or flue leading therefrom, a mass of refractory material filling said passage or flue and having numerous tortuous flues passing through it, and a cooling chamber containing small flues for the passage of fume. 4th. The herein described apparatus for the manufacture of pigment, consisting of a blast furnace, a passage or flue leading therefrom, an oxidizing furnace placed in the line of said flue, consisting of a blast furnace, a passage or flue leading therefrom, a mass of refractory material filling said flue between said oxidizing furnace and the main furnace, and having numerous tortuous flues passing through it, a flue leading from said oxidizing furnace to a cooling chamber having numerous small flues for the passage of fume, a pressure blower connected with the space surrounding said small flues, a settling chamber connecting with said cooling chamber, and pipes connecting said cooling chamber with said blast furnace, oxidizing furnace, and the flue leading from said blast furnace, substantially as shown. 5th. The herein described apparatus for the manufacture of pigment, consisting of a blast furnace, a passage or flue leading therefrom, an oxidizing furnace in the line of said flue, a mass of refractory material filling said flue between said oxidizing furnace and the main furnace, and having numerous tortuous flues passing through it, a flue leading from said oxidizing furnace over or by said main furnace, and in contact therewith to a cooling chamber having numerous small flues for the passage of fume, a settling chamber connected with said cooling chamber, and pipes leading from said cooling chamber to said oxidizing furnace, blast furnace, and to the flue leading therefrom for supplying air thereto, substantially as shown. 6th. The herein described apparatus for the manufacture of pigments, which consists of a shallow blast furnace having tuyeres entering at its side or sides, a passage or flue leading from said blast furnace, an oxidizing furnace in the line of said flue, a mass of refractory material filling said flue between said oxidizing furnace and the main furnace, and having numerous tortuous flues passing through it, a flue leading from said oxidizing furnace to a cooling chamber having small flues for the passage of fume surrounded by an air space, a pressure blower and a pipe connecting it with the space surrounding said contracted flues, a settling chamber connecting with said cooling chamber, and pipes for blowing air to said blast furnace, oxidizing furnace, and to the flue leading from said blast furnace, said pipes connecting with said cooling chamber, in combination, substantially as shown. 7th. The herein described process of manufacturing pigment, which consists in mixing the ores of lead, zinc, or antimony with carbon, subjecting the mixture to an air blast in a suitable furnace, then successively supplying air to the fumes thus produced, bringing them into contact with incandescent fire-clay or other refractory material, subjecting them to the action of an oxidizing flame, then suddenly cooling them, substantially as shown. 8th. The herein described process of manufacturing pigment, which consists of mixing the ores of lead, zinc, or antimony with carbon, subjecting the mixture to an air blast in a suitable furnace, then successively supplying air to the fumes thus produced, bringing them into contact with incandescent fire-clay or other refractory material, subjecting them to the action of an oxidizing flame, and finally collecting them, substantially as shown. 9th. The herein described process of manufacturing pigment, which consists in mixing the ores of lead, zinc, or antimony with carbon, subjecting the mixture to an air blast in a suitable furnace, then successively supplying air to the fumes thus produced, bringing them into contact with incandescent fire-clay or other refractory material, subjecting them to the action of an oxidizing flame, withdrawing said oxidizing flame after the apparatus becomes heated through, then suddenly cooling them when in a highly heated state, and finally collecting them, substantially as shown.

No. 34,821. Cash Drawer and Sale Register.

(Caisse de comptoir et registre de vente.)

David J. Johnston and George M. Verrall, Toronto, Ont., 5th August, 1890; 5 years.

Claim.—1st. The two webs of paper H and I, wound upon the roller J, journalled within the cash drawer case A, and separated on leaving the roller by the bar N and carbon impression paper M, the paper H being carried through an opening in the top of the case A, and below the plate K, and the paper I, over the supporting plate L, located immediately below the said opening in the case A, substantially as and for the purpose specified. 2nd. The two webs of paper H and I, wound upon the roller J, journalled within the cash drawer case A, and separated on leaving the roller by the bar N, and carbon impression paper M, the paper H, being carried through an opening in the top of the case A, and below the plate K, and the paper I, over the supporting plate L, located immediately below the said opening in the case A, in combination with the rollers O, P, and Q, spur pinion B, and rack S, arranged substantially as and for the purpose specified. 3rd. The drawer B, actuated by the spring C, and having a notch D made in it, in combination with the lever E, push bar F, and spring G, arranged substantially as and for the purpose specified. 4th. The paper H, wound upon the roller J, in combination with the roller U, provided with a rubber stamp W, and supporting the inking roller V, substantially as and for the purpose specified.

No. 34,822. Combination Pipe and Nut Wrench. (Clé à écrou et à tuyau.)

Erastus E. King and Lee's Summit M'fg. Co., Lee's Summit, Mo., U.S., 6th August, 1890; 5 years.

Claim.—1st. In a wrench, the combination, with the stock 1, terminating at its upper end in the head 2, and having claw 4, and having the irregular recess 14, terminating at its lower end in the bearing 15, and at its upper end in the cut away portion 16, of the L-shaped locking pawl 17, having the transversely toothed head 18,