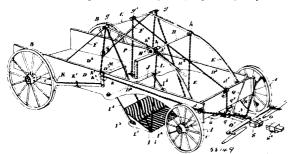
## No. 55, 149. Machine for Removing Stone, Gravel, etc.

(Machine pour enlever la pierre, le gravier, etc.)



George Elijah Green and George Faulkner, both of Assiginack, Manitoulin, Ontario, Canada, 4th March, 1897; 6 years. (Filed 27th January, 1897.)

Claim.—1st. In a machine of the class described, in combination, a stone-collecting device suspended from the front portion of the wagon, a dumping rear portion and means for throwing the stonecollecting portion back over the dumping portion, as and for the purpose specified. 2nd, In combination, a suitable truck, a stonecollecting box situated between the rear wheels, a dumping bottom, a tongue comprising a rigid portion and a movable portion designed to be adjusted longitudinally therewith, means for rigidly holding the portions together and for disconnecting them, and a chain connected to the movable portion of the tongue passing over a pulley suitably supported above the dumping bottom and connected to the forward end of suchbottom, as and for the purpose specified. 3rd. In combination, a suitable truck, a stone-collecting box situated between the rear wheels, a dumping bottom, a tongue comprising a rigid portion and a movable portion designed to be adjustable longitudinally therewith, a hook on the moving portion and a lever pivoted in the stationary portion of the tongue, and lever pivoted in the tongue and having a hook at the lower end designed to be engaged with the hook on the end of the moving portion of the tongue, a chain, holding hook at the rear end of the tongue, and a chain connected therewith, a pulley suitably supported above the dumping box and forming a guide for the chain which is connected at the rear end to the front portion of the dumping bottom, as and for the purpose specified. 4th. In combination, the wagon frame supported on suitable trucks, a stoning fork, a shaft extending from side board to side board of the wagon and forming a journal for the rear end of the stoning fork, and means for raising the front end of the stoning fork to the required height, as and for the purpose specified. 5th. In combination, the wagon frame supported on suitable trucks a stoning fork, a shaft extending from side board to side board of the wagon and forming a journal for the rear end of the stoning fork, a suitable frame supported above the stoning fork and attached to the suitable frame supported above the stoning fork and attached to the wagon, an axle journalled in such frame, a chain extending upwardly from the front corners of the fork to such shaft, guiding pulleys on the shaft and the ratchet wheel, pawl and lifting lever, all arranged as and for the purpose specified. 6th. In combination, the wagon frame supported on suitable trucks, a stoning fork, a shaft extending from side board to side board of the wagon and forming a journal for the great and of the stanjar fork; and means for raising a journal for the rear end of the stoning fork, and means for raising the stoning fork to a position above the dumping box, as and for the purpose specified. 7th. A truss frame, comprising the side boards, a shaft extending through and journalled in the apex of the same, guiding pulleys on the ends of the shaft, chains extending from the stoning fork over the guiding pulleys and supplemental pulleys to the tongue, a hook on the rear end of the longitudinally moving portion of the tongue, and disconnecting means for holding the movable portion to the immovable portion of the tongue, as and for the purpose specified. 8th. A tross frame, comprising the side boards, a shaft extending through and journalled in the apex of the same, guiding pulleys on the ends of the shaft, chains extending tudinally movable portion, of a chain detachably connected to the rear end of the longitudinally movable portion, brake shoes and bars, a lever pivotally connected to the forward end of the bar and to the side boards, holes in the upper ends of the levers, a stoning fork suitably journalled beneath the wagon box to the front of the dumping portion, and a chain extending from the stoning fork over suitable guiding pulleys and around the pulleys at the uppes end of the brake levers, and means for detachably connecting such chain to the rear end of the longitudinally movable tongue, as and for the purpose specified. 10th. The combination with the stationary portion of the tongue and hearing the combination with the stationary portion of the tongue and hearing the combination with the stationary portion of the tongue and hearing the combination with the stationary portion of the tongue and hearing the stationary portion of the tongue and hearing the stationary portion of the station and provided the stationary portion of the station and provided the stationary portion of the station and provided the stationary portion and provided the stationary portion of the stationary portion and the stationary portion are stationary portions. tion of the tongue and longitudinally movable portion and netal straps forming guides for the movable portion and secured to the portions as specified, attached means connecting the stationary portion of the tongue to the movable portion, a stoning fork pivotally swung, and means connected with the movable portion of the

tongue whereby upon the forward movement of such portion the stoning fork is swung over the dumping box, as and for the purpose specified. 11th. In combination, the frame of the wagon and cross shaft, of the stoning fork comprising the longitudinal bars with curved rear end, side plates and arms secured to the side plates and journalled on the cross shaft, as and for the purpose specified.

## No. 55,150. Storage Battery.

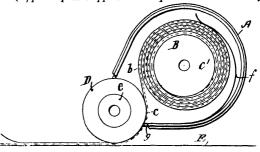
(Accumulateur ou piles secondaires.)

Moriez Eugl and Floris Wüste, assignee of Friedrich Wilhelm Ellermann, all of Vienna, Austria, 4th March, 1897; 6 years. (Filed 27th January, 1896.)

Claim.—1st. A composition for manufacturing accumulator-plates consisting of litharge and sulphate of magnesium mixed into a plastic mass with liquid ammonia, substantially as described. 2nd. The process of manufacturing accumulator-plates consisting in first preparing a plastic mass of litharge and sulphate of magnesium with liquid ammonia, then forming the plates out of this mass, then keeping the plates for several days in a hardening liquor whereby the plates acquire a cement-like hardness, substantially as and for the purposes described. 3rd. The process of manufacturing accu-nulator-plates consisting in forming the plates out of a mass of litharge, sulphate of magnesium and liquid ammonia, then treating plates in a hardening liquor and then effecting the formation of the same in a solution of sulphate of magnesium, substantially as de-

## No. 55, 151. Device for Applying Decorative Films.

(Appareil pour l'application de pellicules décoratives.)



Walter Hamilton Coe, Providence, Rhode Island, U.S.A., 4th March, 1897; 6 years. (Filed 8th January, 1896.)

Claim.—1st. The combination of the delivering roller, with the package roll arranged for revolution in fixed relation to the delivering roller, whereby the package roll must be caused to revolve by a direct pull upon the unwinding strip, and frictional means for preventing the free rotation of the package roll, substantially as described. 2nd In a device for applying decorative films, the combination with the delivering roller, of the holding-case, formed with separable sides, and having inwardly projecting bearings which are adapted to hold the delivering roller and the package-roll for revolution, substantially as described.

## No. 55, 152. Manufacture of Zinc Oxides, Sulphates and Sulphides. etc. (Fabrication d'oxyde de zinc, sulphate, sulfure, etc.)

Atkinson Crossley, Talywain, Monmouth, England, 4th March, 1897; 6 years. (Filed 27th June, 1895.)

Claim.—1st. The process for the manufacture of zinc oxide, which consists in adding sulphuric acid to the metallic ores or compounds, heating the mixture and converting the lead present to an pounds, neating the mixture and converting the lead present to an insoluble salt, and depositing any silver or gold present, then diluting with water and converting the other metals present to soluble salts, filtering off the clear liquor, then treating the clear acid liquor filtered off with an alkaline sulphide, precipitating the copper as copper sulphide, then filtering the liquor from the preci-pitate, treating with an alkali until neutral, passing chlorine into it until all manganese and iron present form manganic and ferror oxides, which are thrown down by a slight excess of alkali, adding an excess of alkali to bring the zinc oxide into solution, and then precipitating the zinc oxide, and filtering off the liquor therefrom, substantially as set forth. 2nd. The process for the manufacture of subs antially as set forth. 2nd. The process for the manufacture of zinc oxide from the metallic ores or compounds, which consists in adding sulphuric acid to the said ores or compounds, heating the mixture, and converting the lead present into insoluble sulphate and leaving as a deposit any gold, silver, or like metals not attacked by the acid, then diluting the solution with water and converting the other metals present into soluble salts, filtering off the clear liquor, and then removing the copper from the solution, then treating the acid solution with an alkali, passing chlorine into it until all the manganese and iron present form manganic and ferric oxides, and continuing the addition of the alkali until these are precipitated, adding an excess of alkali to bring the zinc oxide into solution, and then precipitating the zine oxide, and filtering off the