
#### Abstract

No. 25,316. Process for Producing Mitiosraphic or Vifncographife Copies of Pliotosraplions, etr. (Procdde de Reproduction Lithographique ou Kincogra. phiques des Pholographies, elc.) Mary Walker, Georgo E. Wnlkor and Jean B U. Bonnaud, London, Eng., 10th November, 18s6; 5 yeat Claim-1st. The horoin-desaribed process for prolucing copies of photograph or other designs, that is 10 say, covering the original with a coating of cotaposition forming a ground for drawing, drawing thercon, transiorring the conting to stone or zine or other suitablo plate and printing therefrom tithographically 2 ad The preparation and use of a compustion consisting of water, dexiring, and starch, with kaolin or other equivaiont grounuing substance to form a coating for a photograph or other design on which original can bo codicd substantially as horoin described. 3rd. For giving special grain or texturo to printed copics, the mothod heroin described of improssing the original with its coating on agrained stone or date.


No, 2b,317. Car for Kemoving Snow trom Railroad Cuts and Yards. IChar pour Enlever la Neige des Tranchées et des Cours de Chemins de Fier.)
Joseph Woolley, Rutland, Vt., U.S., 10th Norember, 1856; 5 years.
Claim.-1st. The combination of a car, with hinged sides, as 1, 2, 3, otc., frstoned by means, of the strsps ? for the purposo set forth, 2nd. In combination, with tho car, the riser 14 vith the cuttine sides 13 , and brace 21 and the scat scrow 23 for raising or lowering the riser 14.

## No. 25,318. Pot Cover. (Couvercle de Chaudron.)

William C. Nyo, Bradford, Penn., U. S., 10th November, 1886; 5 ycars.
Claim.-1st. An expansiblo not corer provided vith a detachable handlo, substantially as showa. 2nd. An expansible pot cover, proFided with caps or washers $A$ holding dovice $J$, and a detachable handle which is applicil to the cover, substantially as described. 3rd. The combination of an expansiblo covor, a holding loop or devico, and a dotachable spring haudio which is applicd to tho cover, substantially as set forth. fith. An expansiblo cover and tho washers applied to opposito sides, in combination with a looped holding doapice, the sprins handle proritiod with a projection at its contro to vice. the sprins bande proritod with a projection at its contre to phe onds of the handle, substantially as specified. 5th An oxpansible the onds of the handle, substantially as specified. 5th An oxpansible
pot coror mado fromany suitable material and which is provided pot coror mado from any suitable material and which is provided
with a handlo or handles. whereby the cover can bo oxpanded or contracted at mill, substantially as shown and described.
No. 25,319. Machine tor Holding Challe for Billiard Tables. (Portc-Ctaie pour Tables de Billari.)
Michael J. Kew, Brantford, Ont., 10th November, 15se; 5 years.
Claim.-A chalk-holder to bo used in connection with billiard tables, composed of a semi-circular fat piece of wood A plated at the bottom pulloy 13, circular stcol rod ec cord E. wonden ball E, steel wire $G$. combined with conl springs and olasps, rubber washer $\mathrm{II}_{\text {, }}$ cbalk Í, all arranged and combined as shown
No. 25,320. Appliance for Removing Snowf trom Railway Tracks. (Appareil ${ }_{2}$ 'ur Enlever la Neige des Yoies de Fet.)
Wilson Morningstar, Granıham, Ont., 10th Novomber, 1856; 5 years.
Claim.-The knires B, B, 3, in combination with framowork A having inclined plano C and plough D, substantially as deseribed and for the purpose hereinbeforeset forth.

No. $\mathbf{E}^{2}, 321$. Injector. (Injecteur.)
Paul Schneider. Henry Trenkampand Nicolas Flammang, Cleveland, Ob:o, U.S . 102 h November, $1056 ; 5$ years.
Claim.-1st. The combination of the valve C, provided with a loon or opening in its stem. with the valvo stem II having a valvo formed on its inner end to control tho passags of steam. and prorided with a cam, the stem $H$ being made to pass through tho loop. substantinlls as shown. 2nd. The combmation of the stem H, provided with a stop $F$, the cam E, and the valvo $C$ with the valre $G$ haring a loop or opening $J$ in stem, substantially as described. 3rd. In an injeotor the combination of the force tubo K , with the endwise movinc force tubo $Q$ mado in two parts, so as to bo adjustablo in lenetiland which is provided with the two valres $R$, substantially as set forth. ith. In an injector, the conbination of tho forco tubo $\mathfrak{K}$. With tho force tubo $Q$ which passes throush the chamber $S$. and is provided with nerforntions for the escane of the water from the tube into the body of injector. for the ourpose of rehoving the pressure of water in the tubo Q, substantially as specificd. Sth. In an injector, the combination of tho water passage 0 , tho lift tubes M . N, tho force tubes F . O, chambors W, S, overilow water passapo $Z$ and the tro yalres $G i$ IIt, substantialiy as shown. Gth. Io an injector, tho combination of the water passane lift tubos, the stationary and ondwise movins force tubes. tho chambers W.S. the waste valro II: and the overflow. whercby a constant fow of water can bo kept up through tho injector Whercby a constant fow of water can bo kept up through tho injector without its being orced into the boiler substantially sis doscribed. water passafe, the lift tubeg, the two chambers W. S, tho ondmise moving torce tubo provided with tho ralves $R_{\text {: }}$ and the insido countor moving orco tubo provided with tho ralves $R$ and the insido countor ovorfor, substantially as set forth. 8th. In an injoctor, tho combination of the rater passage, tho stationary forco tube, the lift
ubes and tho chambers iv, $S$ with the ondwiso movine force tubo nrovided with the two valvos th and tho ribs $X$, and the scrov plug upon which tho ribs rest and support the tubo, substuntially as soo cificd. 9th. In an injoctor, a forco tubo, oomposed of two or moro arts which are adjustable ono upon tho othor. substantially as snown. 10th. In an injoctor, a force tube, which is comprosed of twe or more parts, tho outer ones of which are adjustablo upon each ther, and which are providod with valves, substantially as leseribed 1th. In an injoctor, a farce tubo composed of two or muro parts Thich aro adjustablo ono unon the other, and which are provided Tith parforations, subatantially as ser forib 122 h . The combination Tith an injector of nuts $J_{12}$, providod with tho slots K1, the pipo La providod with the projectons ons, the pipe liaving an enlarged head on its inner cad and whach forms is tight jumt with one of the miets, ubstantially as speoffed.
No. izs,322. Sleigh Shoe. (Patin de Traineau.)
Isano B. Secloy, Pbiladelphia, Penn., C. S., 11th November, 1886; 5 зеагs.
Claim.-1st. A detachable shoe for $n$ sleigh runner, formod of wood and provided with means for conneoting tho same with the runner, said shoe when removed from the runner, leaving the latter intact. substantially as described. 2nd. A shoe for a sloigh runnor, formed of wood and havine incans for connecting the same vith the runnor, consisting of a joke, a cross-head and a scrov, substantially as described.

## No. 25,323 . Mowing Machine. (Faucheuse.)

Albert L. Quilliam, Chateanguay, N. Y., U.S., 11th Novombor, 1856 ; 5 yeara.
Claim.-lst. Tho doublo sickle bar herein described tho parts of which are rociprocated in opposito diroctions, as set forth. ond. A sickle bar having knives bovelled on the underside, as set forth 3rd. A guard finger for sicklo bnes formed of a single piece of material. as sot forth. 4 th. Aguard inger for sicklo bars formed of a sincle picco of material ant provided with lugs c, as sot forth 5th Tho conbination of tho sickle bars with the connecting rods $K$, $K$, ho shaft $G$ and the cam and tho ryrist wheel thereon, as sot forth Gth. Tho combination of the sicklo bars, guard fingors connecting rods formed rith ioints $a$, and the jointed frames and 1 b , as sot forth.

No. 25,324. Combined Heatey nind Fan
Blower. Caloryere el Eventoir Com bines.)
Miles C. Iuyett, Detroit, Mich., U.S., 11th November. 1836, 5 sears.
Clam.-list. Tho combination, with a radiator, of an enolesing caso constructed to admit air to the interior, af fan communicating with the interior of the caso, and a housing or wall surrounding saill caso, loaving an air spsco betweon it and the housing, said housing constructed to admit air into the sir spaco, and to permit its circulation partially about said case and pive it entrance into the interior of said oase, so as to pass throuch the radiator, substantially ns described. 2nd. The zombination, with a radiator having an enclosing case constructed to admit air to the interior, of an exterio: housing or wall forming an air space between it and said nase, arr inlets to said air space, and a fan for moving the air through the radiator the construction being such that the air ontering the air-space mili circulato partally around the exterior of the radiatos case, entering tho same and boing tnored throush tho radiatot b7 the fan, substantially as desoribed. Sid. The combination with rudutor bavin a condensing chamber in conncomontherem to admit atr to the interior and to etnit it therofrom, of an enclosing pall or housing forming an air space botweo. it aht said caso, air inlets to said air spaco and a san to move tie nir typough the condensing chamber and radiator, substantialiy 23 described.

## No. 25,325. Mraninery for Cuitivating Land. (Instrument d'. Ggriculture.)

Frank Proctor, Sterenage, Eng., November, 1880 ; 5 sears.
Claim.-list. A cultivatiar machinc consistirg of a stcam enginc $a$ driring orank sbaft $a$, and cranke e, bars c pisoted to links turnile unon ixed cross-bar in, in combinati ns nith the andio irion rames o. holding the loose forks cr thes it to the baren and bolts r . and hinged at a to tho bars $c$, se that thes nan br tumod up or domn and retained by eprings b . 2nd. The rororsible tork ns tino onsisting o flat plato upon bar m, haring a narmws , mert edge, as desoribed and shown in figures $3,4,5$, and 6 .

No. 25,326. Wick Carries, :Poric- Yéche,
Jacob Barnet. Jr., Cincianat1, Ohw, U. S . Ilth Norember, 1ss6; 5 years.
Claim.-lst. A rick-oarricr provided with an eyponder mads in sections, and extondine vithin tie carrior, substantis !is as dosoribed 2nd. A Fick-carrier provided with an expander made in sectons ex tending within the carrier, and binged to tho bottom of the same substantially as described. Srd. A wick-carrier lasving a sectiona oxpander hinged to, and extending within the same, and provided with a roughened holding surfaco, substantially as described.

No. 25, 227 . Apparatus for Utilizins the Current Force of Flowing Wa" ter. (Apparcil pour Ctalizer les Cours d'Eau.)
Fdwin Le Brady, Stamford, Conn , U. S., 11th Novomber, 1880; 5 sears.
Claim-list. Tbo combination of a water power mechanism, a loating support therefor, anchored or otherwise secured in the streata, a dynamoelectric mechine mounted on said Aosting supnort

