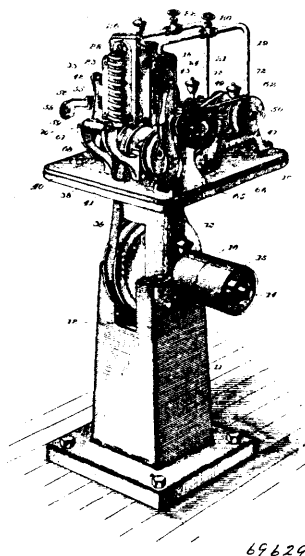


each carrying a saw, a log carriage in operative relation to one saw, means for reciprocating said carriage, means for rotating both saw arbours, and manually controlled means for presenting the work in operative relation to the other saw, substantially as described. 2nd. A shingle sawing machine comprising two arbours driven from a common source of power and each carrying a saw, a reciprocity carriage in operative relation to one saw, and work feed mechanism for presenting the work in operative relation to the other saw, substantially as described. 3rd. A shingle sawing machine comprising a frame having members disposed at right angles one to the other, independent saw arbours mounted on the frame and having saws to work at different angles, a log carriage mounted upon one member of the frame in operative relation to one saw, mechanism for driving both saw arbours and for reciprocating said log carriage, and means for presenting work to the other saw, substantially as described. 4th. A shingle sawing machine comprising a frame, two saw arbours mounted thereon and each having a saw, a reciprocity carriage mounted to travel in operative relation to one saw, a carriage driving shaft, and a vibratory arm connected with said log carriage and having operative connection with the carriage driving shaft, substantially as described. 5th. In a shingle sawing machine, the combination with a saw arbour and a reciprocity carriage, of a carriage driving shaft, a gear element driven by said shaft and having an eccentric stud, and a vibratory arm linked to said carriage and operatively connected by the stud to said gear element, substantially as described. 6th. In a shingle sawing machine, the combination with a saw arbour and a reciprocity log carriage, of a vibratory arm linked to said carriage and provided with a longitudinal guideway, a slide fitted in said guideway, a gear element having a stud connected with said slide, and means for rotating the gear element, substantially as described. 7th. In a shingle sawing machine, the combination with a saw arbour, and a reciprocity log carriage, of a variable speed driving mechanism having operative connection with said carriage and including means, substantially as described, whereby the carriage may be advanced slowly toward the saw and returned with an accelerated motion, as set forth. 8th. In a shingle sawing machine, the combination with a saw arbour, and a reciprocity log carriage, of a gear element provided with an eccentric stud, a vibratory arm having its axis of vibration below the axis of rotation of said gear element, and said arm connected operatively with the eccentric stud, and means for connecting the vibratory arm with said log carriage, substantially as described. 9th. In a shingle sawing machine, the combination with a saw arbour and a reciprocity log carriage, of a vibratory arm, and a rod between said log carriage and the arm and having adjustable connection with one of said elements, substantially as described. 10th. In a shingle sawing machine, the combination with a saw arbour, and a reciprocity log carriage, of a shaft having a gear element, a vibratory arm connected with said gear element and with said log carriage, and a carriage driving shaft geared to the first-named shaft, one of said shafts being movable to throw the two shafts out of engagement, substantially as described. 11th. In a shingle sawing machine, the combination with a saw arbour and a reciprocity log carriage, of a shaft carrying a gear element, a vibratory arm in operative relation to the gear element and connected with said log carriage, a carriage driving shaft geared to the first-named shaft, and means for shifting the carriage driving shaft out of operative relation to the gear element, substantially as described. 12th. In a shingle sawing machine, the combination with a saw arbour and a reciprocity log carriage, of a shaft having a gear element, a train of operative connection from said gear element to said log carriage, a carriage driving shaft geared to the first-named shaft and slidably mounted for disengagement therefrom, a counterpoised shipping lever, an intermediate lever connected with the shipping lever and with a slidable bearing of the carriage driving shaft, and means for locking the shipping lever in adjusted position, substantially as described. 13th. A shingle sawing machine comprising an angular frame, a main saw arbour provided with a saw, another saw arbour disposed at right angles to the first-named arbour and likewise provided with a saw, a log carriage on one part of the frame and in operative relation to one saw, a carriage driving mechanism driven by a train of gear connections from the main saw arbour, and a countershaft also geared to the main saw arbour and to the second saw arbour, substantially as described. 14th. In a shingle sawing machine, the combination with a trimming saw, of a vibratory guide bar normally held by the energy of a suitable retractor in an inclined position adjacent to the working edge of said saw, substantially as described. 15th. In a shingle sawing machine, the combination with a trimming saw, of a vibratory guide bar, a retractor arranged to hold said guide bar in a raised position adjacent to the edge of said saw, and means for limiting the vibratory movement of said guide bar, substantially as described. 16th. In a shingle sawing machine, the combination with a trimming saw, of a vibratory guide bar hinged to a suitable support and provided with a shingle rest, and means engaging with the guide bar to hold the same in operative position adjacent to the edge of said saw, substantially as described. 17th. In a shingle sawing machine, the combination with a trimming saw, of a fixed bracket, a guide bar hinged to said bracket and provided with a work rest, a cushion spring seated on the bracket and against said guide bar, and stop plates disposed in the path of the unconfined end of the guide bar to positively arrest the movement thereof in opposite directions, substantially as described.

**No. 69,629. Heel and Sole Burnishing Machine.***(Machine à brunir les talons et semelles de chaussures.)*

Henry Francis Rooney, and Mellen Bray, both of Randolph, Massachusetts, U.S.A., 10th December, 1900; 6 years. (Filed 5th November, 1900.)

*Claim.*—1st. A machine of the character specified, comprising in its construction a supporting frame, a reciprocating tool holder mounted on said frame and provided with a transverse groove, a bar secured in said groove, a crank and pitman connected with each end of said bar, and a burnishing tool removably secured to said tool holder. 2nd. A machine of the character specified, comprising in its construction a supporting frame, a stationary heating chamber mounted on said frame, a reciprocating tool holding plate slidably mounted upon said heating chamber, a burnishing tool removably secured to said holding plate, and means for imparting a rapid reciprocating movement to the said tool holder. 3rd. A machine of the character specified, comprising in its construction a supporting frame, a stationary heating chamber mounted on said frame, a reciprocating tool holding plate slidably mounted upon said heating chamber and having a loop or strap 29, a burnishing tool having a tongue 29 at its lower end adapted to engage the said loop or strap, means for removably securing the upper end of the tool to the said plate, and means for imparting a rapid reciprocating movement to the said tool holder. 4th. A machine of the character specified, comprising in its construction a supporting frame, a steam chamber carried thereby, steam pipes connecting with said chamber, a tool holding plate carried by said chamber and adapted to slide thereon, a burnishing tool removably secured to said tool holder, and mechanism connected with the main driving shaft for imparting a reciprocating movement to said tool holder and tool. 5th. A machine of the character specified, comprising in its construction a main frame, a supporting bracket mounted thereon, a steam chamber carried thereby, steam pipes connecting with said chamber, guideways secured to the face of said steam chamber, a tool holder adapted to slide in said guideways, a burnishing tool removably secured to said holder, and connecting mechanism with the driving shaft for imparting a rapid reciprocating movement to the tool holder. 6th. A machine of the character specified, comprising in its construction a supporting frame, a heating chamber mounted thereon, guideways secured on the front of said chamber and having slots, a tool holding plate adapted to slide in said guideways, a burnishing tool carried by said holder, a transverse bar fitted in a recess in said tool holder and having its ends extending through the slots in the said guideways, a driving shaft located beneath said tool holder, and pitman connections between the said shaft and the ends of the transverse bar for imparting a reciprocating movement to the tool holder.

**No. 69,630. Process of Extracting Metals.***(Procédé pour extraire les métaux.)*

S. H. Johnson & Company, Stratford, Essex, assignee of Henry Livingstone Sulman, 66 Gracechurch St., London, all of England, 10th December, 1900; 6 years. (Filed 13th December, 1899.)

*Claim.*—1st. A process for the treatment of ores or slimes in which a solvent solution is used for displacing the residual water in pressed slime cakes for the purpose described. 2nd. A process for the treatment of ores or slimes in which a portion of the water is first removed by pressure and the remainder displaced by an equal volume of a solvent solution. 3rd. A process for the treatment of ores or slimes containing metal in which the residual water in pressed