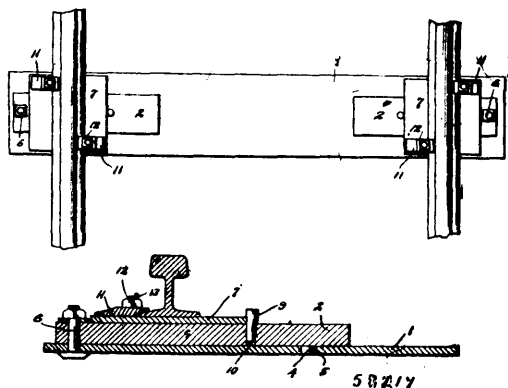


the lower rear drum 6, a transverse steam drum 13 connected to the return drums 10 and 12, substantially as and for the purpose set forth. 4th. A steam generator comprising the drums 1, 2, and 6, 8, the drums of each set arranged vertically above each other, and the front set arranged above and in advance of the rear set, a series of tubes connecting the upper and the lower drums of each set, and a series of independent circulating tubes 10, 12, connecting the rear set of drums with the upper drum of the front set, substantially as shown and described.

No. 58,217. Combination Tie Rail Fastener.

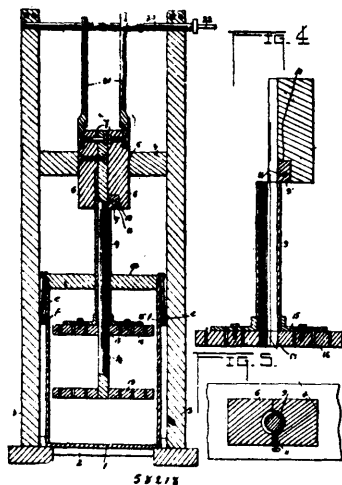
(Attache pour assujétir les rails aux traverses.)



Jacob Scott Flegel, Clearfield, Pennsylvania, U.S.A., 27th November, 1897; 6 years. (Filed 16th November, 1897.)

Claim.—The combination of a metallic tie having holes near its ends, blocks having pins at their inner ends which project through the holes in the ties, bolts for securing the outer ends of the blocks to the ties, said blocks being provided with longitudinal grooves in their sides, a chair having side flanges adapted to said grooves, a stop pin for holding the chair in position on said blocks, and clamps bolted to said chair, substantially as set forth.

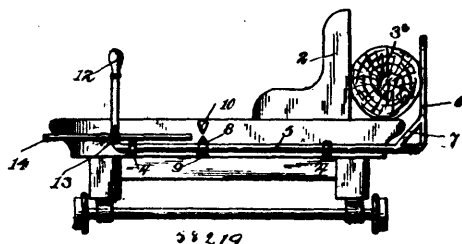
No. 58,218. Churn. (Baratte.)



Joseph Weggeman, Henderson, Colorado, U.S.A., 27th November, 1897; 6 years. (Filed 16th November, 1897.)

Claim.—In a churn, the combination with the churn body and the standards, of a cross-bar secured thereto near their upper ends and provided with a rectangular bearing opening, sliding blocks fitted in said opening and provided with longitudinal grooves in their inner faces, dasher shafts secured to said sliding blocks, one of said dasher shafts being located in the groove of said blocks and forming a spline or rib for guiding the blocks in their vertical movement, one of said dasher shafts being tubular and the other projecting through it, dashers secured to the extreme lower ends of said dasher shafts, a top consisting of two hinged sections, means for securing the top to the churn body, and means for securing the sections about the dasher shafts, a crank shaft journaled in bearings in the upper ends of said standards, and links connecting the blocks with the shaft, substantially as set forth.

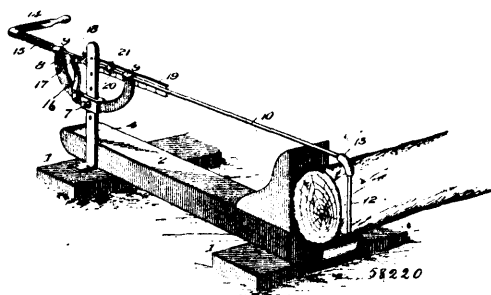
No. 58,219. Slab Gauge or Indicator for Saw-mill Carriages. (Jauge de dosses ou indicateur pour châssis de scieries.)



George Glass, Port Huron, Michigan, U.S.A., 27th November, 1897; 6 years. (Filed 16th November, 1897.)

Claim.—1st. A slab-indicator or gauge for saw-mill carriages, comprising the carriage-bed provided with the fixed pointer 10, and the transverse rod 5 mounted on said carriage and provided with the right-angular gauge-arm 6, and the pointer 8 adjustably mounted on said rod, substantially as and for the purpose set forth. 2nd. A slab-indicator or gauge for saw-mill carriages, comprising the carriage-bed, the pointer 10, guide-eyes 4, 4, and guide-rod 14 fixed to said bed, in combination with the transverse sliding rod 5, having a longitudinal and a rotary movement in said guide-eyes and provided at its outer end with the gauge-arm 6 and at its inner end with the lever handle 12, formed with the clamp offset 13, and the pointer 8 adjustably secured on the rod 5, substantially as and for the purpose set forth.

No. 58,220. Slab Gauge or Indicator for Saw-mill Carriages. (Jauge de dosses ou indicateur pour châssis de scieries.)



George Glass, Port Huron, Michigan, U.S.A., 27th November, 1897; 6 years. (Filed 16th November, 1897.)

Claim.—1st. A slab indicator or gauge for saw-mill carriages, comprising the carriage-bed, the standard 4 fixed thereon, the cross-head 6 vertically adjustable thereon, and provided with the arms 8, 8', the cylindrical rod 10 longitudinally and axially adjustable in said arms and terminating at its outer end in the gauge-arm 12, and means as described for indicating the point of longitudinal adjustment of said rod, substantially as shown and described. 2nd. A slab indicator or gauge for saw-mill carriages, comprising the carriage-bed, the standard 4 provided with the transverse orifices 5, 5, the cross-head 6 vertically adjustable on said standard and provided with the arms 8, 8', terminating in the aligned sleeves 9, 9', the spring-actuated pin 7 mounted in said cross-head and adapted to engage said orifices in the standard, the rod 10 journaled in and longitudinally adjustable in said sleeves, and having its outer end terminating in a right-angular gauge-arm 12, the handle 14 fixed on the opposite end of said rod, the spiral spring 15 encompassing said rod between the handle and the sleeve 9, the fixed plate 19 provided with the graduated scale, and the pointer 20 adjustably mounted on said rod and adapted to traverse said scale, substantially as shown and described. 3rd. A slab indicator for saw-mill carriages, comprising the carriage-bed, the standard 4 provided with the transverse orifices 5, 5, the cross-head 6 vertically adjustable on said standard and provided with the arms 8, 8', terminating in the aligned sleeves 9, 9', the spring-actuated pin 7 mounted in said cross-head and adapted to engage said orifices in the standard, the rod 10 journaled in and longitudinally adjustable in said sleeves and having its outer end terminating in a right-angular gauge-arm 12, the handle 14 fixed on the opposite end of said rod, the spiral spring 15 encompassing said rod between the handle and the sleeve 9, the fixed plate 19 provided with the graduated scale, and the pointer 20 adjustably mounted on said rod, the square collar 18 adjustably mounted on said shaft, and the spring-dog 16 fixed to said cross-head and having its free end terminating in the square jaws 17, 17, adapted to engage said collar, substantially as shown and described.