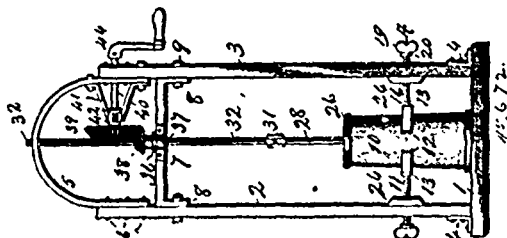


adapted to fit in the slots of the two pipes, substantially as shown and described. 2nd. The combination of a pipe A, having a slot E therein, the pipe B having the slot C therein, and the sheet metal coupling H, I, having the extensions h, i, substantially as shown and described. 3rd. A pipe coupling A, having therein a slot E, pipe B having therein a slot C, and having its ends formed to fit the upper portion of pipe A, and a sheet metal coupling H, I, provided with the extensions h, i, and with the rivets J, F, substantially as shown and described.

No. 45,672. Churn. (Baratte.)



Emmette W. Settle, Cedar City, Missouri, U.S.A., 3rd April, 1894; 6 years.

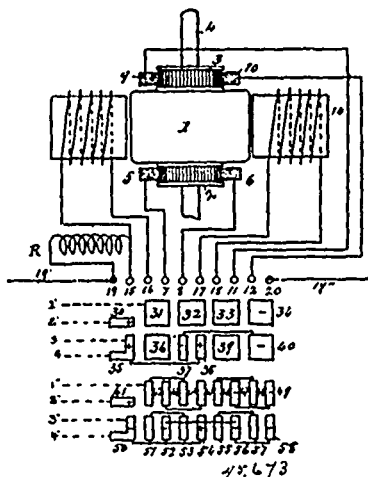
Claim.—1st. An improved churn, adapted to be mounted upon a base having two upwardly projecting uprights, metallic interiorly screw-threaded bushings located in alignment with said uprights, screw-threaded rods adjustable in said bushings, a V-shaped clamp located upon the inner end of each of said adjusting rods, said rods adjustable independent of any movement of the clamping jaw, and said arms comprising said jaw provided upon their inner sides with projecting teeth made of flexible material, substantially as set forth. 2nd. An improved churn adapted to be held upon a base having two upright standards connected by a curvilinear strip at the upper end, and intermediately by a horizontal cross-piece, said strip and cross-piece providing bearings for a vertically mounted shaft, means for revolving said shaft, the lower end of said shaft squared and provided upon two sides with corrugations, plates having inner corrugated sides secured to the lower end of said shaft, a churn dasher secured to a vertical dasher-rod, the upper end of said rod squared and corrugated and adapted to be held between the corrugate plates secured to the lower end of the driving shaft and held therein by removable thumb screws, substantially as set forth. 3rd. An improved churn adapted to be held upon and removable from a base construction, two upright rectangular standards secured at the ends of said base intermediate of its width, the upper end of said standards connected by a curvilinear strip secured upon the inner sides of said standards, a cross-piece secured to the inner sides of said standards below the curvilinear strip by its downwardly projecting lugs bolted to said standards, bearings provided in said curvilinear strip and cross-piece for a vertical shaft carrying a horizontal pinion, a collar secured upon said shaft adjustable to prevent any downward movement of the shaft and to compensate for its wear and the wear upon the pinion, a vertical horizontally mounted driving-gear adapted to engage said pinion, said gear mounted upon a horizontal shaft secured in bearings provided by a V-shaped bracket secured to the curvilinear strip, and by a metallic bushing projecting through said strip and one of the upright standards, a crank secured upon the projecting end of said shaft, the said upright standards having interiorly screw-threaded metallic bushings located in alignment within same, screw-threaded adjusting rods having mounted on their inner ends V-shaped arms, provided upon their inner sides with projecting teeth made of yielding material, said adjusting rod adjustable in said metallic bushings, and the adjustment of same adapted to hold the churn upon said base, a churn-dasher located in said churn, an upwardly-projecting dasher-rod, said dasher-rod removably secured to the lower end of the vertical driving-shaft, and the revolving of the crank adapted to revolve the churn-dasher, substantially as set forth.

No. 45,673. Electric Motor. (Moteur électrique.)

Robert Lundell, Brooklyn, New York, U. S. A., 3rd April, 1894; 6 years.

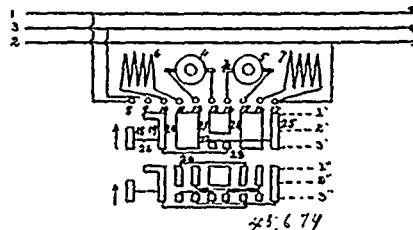
Claim.—1st. An electric motor having its armature and field magnet each wound with independent sections of coils, in combination with circuit-changing devices for varying the series and multiple-arc relation of the armature-coils, and circuit-changing devices for varying the series and multiple-arc relation of the field-magnet coils, substantially as set forth. 2nd. An electric motor having two or more circuits, each of which circuits includes in series a section of coils on the armature and a section of coils on the field-magnet, in combination with circuit changing devices for varying the series and multiple-arc relation of said circuits, substantially as set forth. 3rd. An electric motor having two or more independent sections of coils on its armature, each connected to a separate commutator, a section of coils on the field-magnet connected in series with each of said armature-sections, and circuit-changing devices for varying the series and multiple-arc relation of the armature and

field-sections, substantially as set forth. 4th. The combination, with an electric motor having its armature and its field-magnet each wound with independent sections of coils, of circuit changing devices



connected therewith for simultaneously changing the series and multiple-arc arrangement of the armature-sections and the series and multiple-arc arrangement of the field-magnet coil-sections, substantially as set forth. 5th. The method of regulating the speed of an electric motor, which consists in varying both the series and multiple-arc relation of its armature coils, and the series and multiple-arc relation of its field-magnet coils, substantially as set forth. 6th. An electric motor, having its armature and field-magnet each wound with independent sections of coils, in combination with a resistance in the motor-circuit, circuit changing devices for varying the series and multiple-arc relation of the armature coils, circuit-changing devices for varying the series and multiple-arc relation of the field-magnet coils, and circuit changing devices for cutting said resistance in and out of circuit, substantially as set forth. 7th. The combination of a field-magnet, having several independent coils, an armature having an equal number of coils, a commutator for each armature-coil, and a switch mechanism having contact-plates co-operating with switch-brushes to close the circuit through all the coils in series when in one position and to close the circuit through the coils in multiple arc when in another position, substantially as set forth. 8th. The combination of a field-magnet, having several independent coils, an armature having an equal number of coils, a commutator for each armature-coil, an artificial resistance connected or adapted to be connected to the line-terminals and to a field-terminal, and a switch-mechanism, having contact plates co-operating with switch-brushes to close the circuit through all the coils in series when in one position and to close the circuit through the coils in multiple-arc when in another position, said switch having, also, contacts co-operating with the terminals to which said resistance is connected and arranged to throw the resistance in circuit when the switch is in certain positions and out of circuit when the switch is in other positions, substantially as set forth.

No. 45,674. Electric Motor. (Moteur électrique.)



Robert Lundell, Brooklyn, New York, U.S.A., 3rd April, 1894; 6 years.

Claim. - 1st. The combination of three or more conductors between different pairs of which different electro motive forces are maintained, a motor having two or more armature-coils, circuit changing devices for connecting said motor at will between different pairs of said conductors, and circuit-changing devices for altering the relation of the armature-coils, substantially as described. 2nd. The combination of three or more conductors between different pairs of which different electro-motive forces are maintained, a motor having two or more armature-coils and an equal number of field-magnet coils, circuit-changing devices for connecting said motor at will