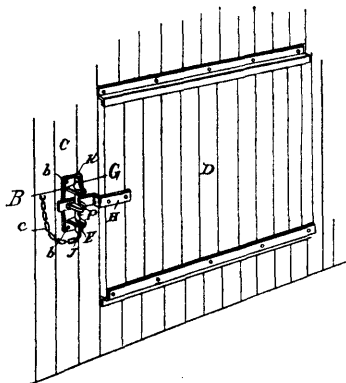


sides of which are provided with slots for the passage of said band, and suitable operating mechanism, one of the supporting pulleys of said endless band being journaled upon a bracket extending over the supporting belt to hold the said endless band in contact with the unfolded edge of the paper ribbon by which the rod or filler is partially enveloped, substantially as and for the purpose set forth. 12th. In a cigarette machine, the combination with the grooved supporting belt, of an endless pasting band mounted upon suitably arranged pulleys, the paste box having slotted sides for the passage of said band, and a wheel or idler mounted in a bracket extending over the edge of the supporting belt, substantially as and for the purpose set forth. 13th. In a cigarette machine, the combination of the endless supporting belt having a semi-circular groove, and the superimposed correspondingly grooved carrying belt the under face of which is in contact with the upper face of the supporting belt, and the pasting and folding mechanism, said mechanism comprising, essentially, the paste box having slotted sides, the endless band mounted upon suitable rollers holding it in contact with the unfolded edge of the paper cover of the cigarette, and the folding brush, substantially as and for the purpose set forth. 14th. In a cigarette machine, the cutting mechanism comprising a longitudinally reciprocating plate carrying a pair of guide tubes, and a box moving on said plate in a curvilinear path and carrying a rock shaft provided with an outwardly extending arm having a knife or cutter, a mechanism for operating the said reciprocating plate and box and for imparting motion independently to the rock shaft carrying the knife or cutter, substantially as set forth. 15th. In a cigarette machine, the combination with the eccentrics 108 moving in unison, and the plate 109 having slots 110 engaging said eccentrics, said plate carrying the guide tubes, of the longitudinally and laterally reciprocating box mounted on said plate and carrying a vibrating cutter, and mechanism for independently operating the said box and cutter, substantially as set forth. 16th. In a cigarette machine, the combination with the eccentrics 108 moving in unison, the plate 109 mounted in guides longitudinal of the machine and having lateral slots 110 through which said eccentrics project, and aligned guide tubes on said plate, of a box resting on said plate and having holes in its bottom loosely fitting said eccentrics, a rock shaft journaled in the box and supporting a knife, a pulley on said shaft, and a belt leading from said pulley upwardly to a source of power at some distance above the plate and box, substantially as described. 17th. In a cigarette machine, the combination with the mechanism for feeding the tobacco and the paper ribbon for compressing the tobacco into a cylindrical rod or filler and folding and for pasting the paper wrapper, of a pair of vertical shafts arranged at the delivery end of the machine and having eccentric discs at their upper ends, mechanism for rotating the said shafts in unison, a longitudinally reciprocating plate having transverse slots engaged by said eccentrics, supporting and guiding devices for the said plate, and a box mounted upon and moved in a curvilinear path by the said eccentrics above the reciprocating plate and having a vibrating knife or cutter, and mechanism for operating the same, substantially as and for the purpose herein shown and specified.

**No. 42,793. Car Seal Lock.** (*Seau pour serrures de chars.*)

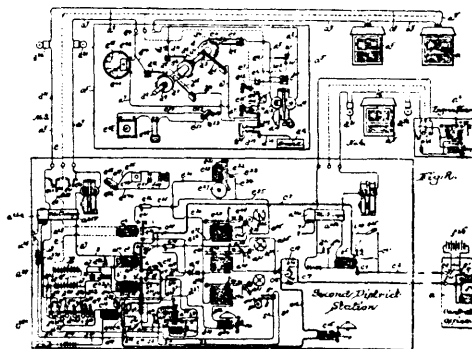


John Dowling, Altoona, Pennsylvania, U.S.A., 2nd May, 1893; 6 years.

*Claim.*—1st. In a lock, the combination, with the hasp of a base, plate having a series of staples in vertical alignment, one of which receives the hasp, leaf springs rising from the upper staple and converging normally toward their tips, a pin passing upward through said staples, and having a knob at its upper end resting on the tips of the springs, and a seal connected with the rod beneath the lowermost staple, as and for the purpose set forth. 2nd. The combination, with the lock plate having the outwardly projecting lugs provided with holes, and inwardly extending slots, the holes and slots registering, the cylindrical slotted guard surrounding the hole of the upper lug, the slot of the guard being provided with parallel flanges, and the L-shaped spring tongues riveted to the upper lug, extending up into the guard, and having their upper ends converged, of the hasp for engaging the intermediate lug, the bolt or pin having the upper and lower heads of less diameter than the holes of the lugs,

the lower head exceeding in diameter the upper head and provided with a notch and depending eye, the circular leather seal adapted to be introduced over the upper head of the pin and rest against the lower head thereof, the rod having opposite eyes, one of which engages with the eye of the bolt or pin, and the chain loosely connected to the lower end of the rod and adapted to be connected to a car, substantially as specified.

**No. 42,794. Signal Transmitting Apparatus and System.** (*Appareil et système de transmission des signaux.*)



Albert Watts, assignee of Henry Augustus Chase, both of Boston, Massachusetts, U.S.A., 2nd May, 1893; 6 years.

*Claim.*—1st. In a signalling system, the combination of the following instrumentalities, viz.: a metallic circuit, a signal transmitting mechanism located therein, a polarized bell in said circuit at the transmitting mechanism, a pole changer in said metallic circuit, an electro-magnet to operate it, a local circuit in which said magnet is located, a receiving mechanism operated by the transmitting mechanism, a shaft, and a detachable signal wheel mounted on said shaft and operated by the receiving mechanism to actuate the pole changer in the metallic circuit, whereby any one of a series of signal wheels may operate to retransmit to the transmitting mechanism any one of a series of signals, substantially as described. 2nd. In a system for transmitting signals, the combination of the following instrumentalities, viz.: a metallic circuit provided with one or more signal transmitting mechanisms, a main line battery in multiple with the metallic circuit, a ground tap normally disconnected from the main line and provided with a single relay and battery, and a switch to connect both sides of the line with the ground tap, whereby a single relay may receive the signal transmitted over either side of the line, substantially as described. 3rd. The combination with a metallic circuit, of a signal transmitting mechanism located therein and consisting of three independent signal mechanisms of like significance or character arranged to operate in succession, as described, a normally open ground tap at the transmitting mechanism, adapted to be connected with both sides of the line when the transmitting mechanism is operated, a normally closed circuit controller in the said ground tap, a relay in the metallic circuit responsive to interruptions in the metallic circuit, a ground tap at the receiving end of the metallic circuit, normally disconnected from the metallic circuit and provided with two terminals, a single relay in the ground tap, a battery in the ground tap, and switches to connect both sides of the metallic circuit with the terminals of the ground tap, substantially as described. 4th. In a fire alarm system for transmitting signals, the combination of the following instrumentalities, viz.: a district station, one or more metallic circuits extended from said station, and provided with one or more signal transmitting mechanisms, a relay in the district station included in the metallic circuit, a local circuit in the said station including a signal receiving instrument, an armature for said relay controlling said local circuit, a central station, a normally closed main line connecting the said stations, and controlled by the armature of the relay in the district station, a relay in the central station included in the line connecting the said stations, a local circuit in the central station including a signal receiving instrument, and an armature for the central station relay controlling the local circuit in the said central station, a ground tap in the district including a relay, an armature for said ground tap relay normally included in the main line circuit connecting the stations, and means to connect the ground tap with both sides of the metallic circuit, substantially as described. 5th. In a fire alarm system, the combination with a central station, of a series of district stations each having connected to it one or more district circuits provided with one or more signal transmitting mechanisms, a main line connecting each district station with the central station, a receiving instrument in the district circuits, a receiving mechanism in the central station responsive to the operation of a signal transmitting mechanism in a district circuit, a second receiving instrument in the district station located in a normally open ground tap and adapted when operated to change the condition of the main line between the district and central stations, and means to connect the said ground tap, with both sides of a district circuit, substan-