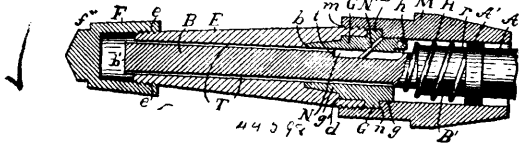


inside of the box, entering said openings, springs *l l*, made to press upwards against the lid *c*, and a wedge-shaped headed lever *H, J*, or its equivalent, arranged to release the lid *c* by a slight upward pressure of the hinged lids *D, E*, of the shell *C*, and coffin *F*, respectively for the purpose specified. 4th. The combination of the box *A*, hinged lid *D*, of the shell *C*, and the cord *G*, for the purpose specified. 5th. The combination of the box *A*, hinged lids of shell and coffin, devices for opening the lid *c*, and rungs or steps *n* for the purpose specified.

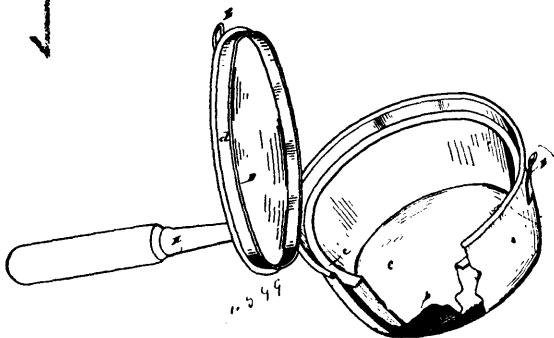
No. 44,598. Axle Box. (Boîte à graisse.)



Aaron Huber Sensenig and Samuel Weaver Horst, Hummelstown, both of Pennsylvania, U.S.A., 2nd November, 1893; 6 years.

Claim.—1st. The combination, with an axle box, of a spindle, a cap connected with the end of the axle box, a sleeve on the spindle inserted in the inner end of the axle box, a collar on said sleeve engaged by the end of the axle box, and a shoulder in the cap, and a pin passing through the sleeve and entering a slot in the spindle, said slot forming a shoulder at its outer end, substantially as and for the purpose specified. 2nd. The combination, with an axle box, of a spindle having a boss formed on its inner end, a cap connected with the axle box, a sleeve on the spindle inserted in the inner end of the axle box, and adapted to engage the boss on the spindle, a collar on said sleeve engaged by the end of the axle box, and a shoulder in the cap, and a pin passing through the sleeve and entering a slot in the spindle, said slot forming a shoulder at its outer end, substantially as and for the purpose specified. 3rd. The combination, with an axle box, of a spindle having a boss formed on its inner end, a cap connected with the axle box, a sleeve inserted in the inner end of the axle box, and adapted to engage the boss on the spindle, a collar on said sleeve engaged by the end of the axle box, and a shoulder in the cap, a pin passing through the sleeve and entering a slot in the spindle, said slot forming a shoulder at its outer end, a fixed collar separating the spindle and the axle, and a spring having one end secured in said boss and the other in the sleeve, substantially as and for the purpose specified. 4th. The combination, with an axle box, of a spindle having a boss formed on its inner end, a cap connected with the axle box, a sleeve on the spindle having a conical end inserted in the inner end of the axle box, and adapted to engage the boss on the spindle, a collar on said sleeve engaged by the end of the axle box, and a shoulder in the cap, a pin passing through the sleeve and entering a slot in the spindle, said slot forming a shoulder at its outer end, a fixed collar separating the spindle and the axle, and a spring coiled about the spindle and having one end secured in said boss and the other in the sleeve, substantially as and for the purpose specified.

No. 44,599. Warming Pan. (Bassinoire.)



Joseph Barton, Detroit, Michigan, U.S.A., and David Edgar, Windsor, Ontario, Canada, 2nd November, 1893; 6 years.

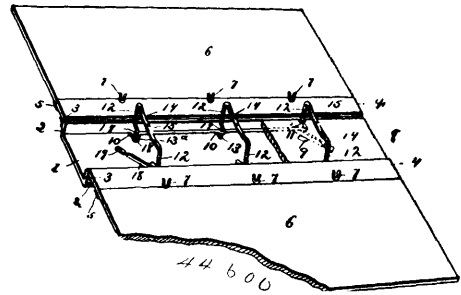
Claim.—The combination of an outer and an inner pan separated from each other by an air space, a cover *D*, provided with a flange *d*, adapted to hold the inner pan securely in place when closed, substantially as described.

No. 44,600. Temporary Binder. (Reliure temporaire.)

Frank D. Hastings, Oscar N. Durand, Alphonse Legendre and Isaac Rochon, all of Champion, Michigan, U.S.A., 2nd November, 1893; 6 years.

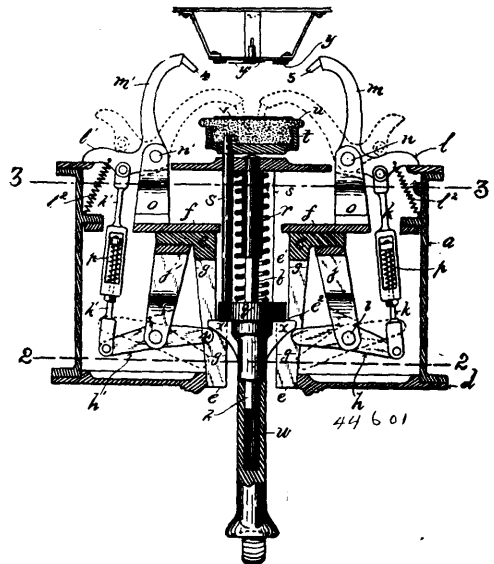
Claim.—1st. In a temporary binder, a back and opposite hinged covers, in combination with pairs of opposite independent ver-

tical swivelled wire shafts having their upper ends inwardly and horizontally bent and bevelled to form joints, and near their lower ends provided with horizontally disposed crank portions or arms,



connecting rods loosely connecting the cranked portions of each series of shafts, and springs for normally closing the upper ends of the pairs of opposite shafts, substantially as specified. 2nd. In a temporary binder, the combination with the back, of the opposite series of wire shafts journaled therein and having their upper ends inwardly disposed and overlapped and near their lower ends provided with cranked portions, the springs bearing on the cranked portion of a shaft of each series, connecting rods between the shafts of the series, hinged cover sections at the sides of the back, clasps thereon, and main cover sections hinged to said cover sections beyond the clasp, substantially as specified. 3rd. In a temporary binder, the combination with the oblong back having the surrounding wall or flange, the hinged covers at the sides of the flange, and the diaphragm or plate arranged over said side walls or flanges and secured to the back, opposite bearings formed in the diaphragm or plate and bottom of the cover, wire shafts journaled in the bearings and having their upper ends inwardly bent, bevelled and meeting, and near their lower ends provided between the diaphragm and bottom of the back with cranked portions, connecting rods between said cranked portions, and flat springs obliquely and oppositely disposed and secured to the bottom of the back, and bearing against the cranked portion of a shaft of each series, substantially as specified. 4th. The support or base, and the series of independent vertical wire shafts journaled therein at each side of the support or base and adapted to swing laterally, and having their upper ends inwardly and horizontally disposed and overlapping, and horizontal cranks formed near the lower ends of the shafts, in combination with the connecting rods arranged on each side and connecting each series of shafts independently, so that the series on one side work independently of the series on the other side, and yet each series will work in unison, substantially as specified.

No. 44,601. Time Recorder. (Régistre horaire.)



Alfonso Lee Jaynes and John Hathaway Ball, both of Buffalo, New York, U.S.A., 2nd November, 1893; 6 years.

Claim.—1st. In a recording apparatus, the combination of a key or other instrument, a tape and inking ribbon, a clock dial and a movable type, the said key or other instrument when moved in one direction forcing the tape and ribbon against the clock dial, and when moved in the other direction forcing the type against the ribbon and tape, substantially as shown and for the purpose de-