striking the bell, a stop for the spring lever, and a bent spring secured to the spring lever and adapted to be actuated to cause the hammer to ring the bell each time the said pointer is moved from its zero position, substantially as set forth. 3rd. In a cash register, the combination, with an indicating pointer and its shaft, of a pivoted locking lever provided at its upper end with a bent spring and a dent and having a bent lower end 57, a trip lever secured to the said shaft and adapted to engage with the said detent, a cash the said shaft and adapted to engage with the said detent, a cash receptacle provided with a pivoted lid, and a weighted lever normally resting on the said end 57 and adapted to open the lid each time the said pointer is moved forward, substantially as set forth. 4th. In a Cash register, the combination, with the shaft f positively connected with the indicating pointers, of a series of ratchet wheels secured on the said shaft and provided with teeth of different pitch, a series of pivoted finger levers provided with spring pressed pawls and adapted to operate the ratchet wheels, and stops for limiting the movements of the said levers, substantially as set forth. 5th. In a cash registor, the combination, with the shaft at, of the recording cash register, the combination, with the shaft  $g^1$ , of the recording mechanism adapted to be revolved in one direction only, of the rollers T  $T^1$ , toothed wheels positively connecting the said rollers with A. with the said shaft, whereby a strip of paper may be fed forward for a distribution. a distance proportional to the movement of the recording mechanism, and a guide for supporting the said strip and permitting it to pass out of the machine, substantially as set forth.

## No. 42,592. Car Journal Box. (Coussinet de tourillon.)

Edward W. M. Hughes, Chicago, Illinois, and Edward N. Dickerson, New York, New York, both in U. S. A., 13th April, 1893; 18 years.

Claim.—1st. A journal box for cars, formed of a single piece of steel and having but one joint, substantially as described. 2nd. The pressed steel journal box formed of one piece of steel, and having flanges B B<sup>1</sup>, C D and projection K, formed of one piece of steel with but a single joint substantially as described. 3rd. A steel with but a single joint, substantially as described. 3rd. A journal box for cars, formed of a continuous piece of pressed steel, and having a and having flanges surrounding the same pressed from part of the metal of the box, substantially as described.

## $N_0$ . 42,593. Corn Harvester.

## (Moissonneuse pour blé-d'inde.)

D. M. Osborne & Co., Auburn, New York, assignee of Christian H-Salzman, Chicago, Illinois, both in U.S.A., 13th April, 1893;

Claim.—1st. In a corn harvester the supporting cross pieces D  $D^1$ having arches therein located in position to clear the row of stalks adjacent to the row acted on by the cutter, substantially as specified and In 2nd. In a corn harvester, the combination, with the supporting cross In a corn harvester, the combination, with the supporting cross place I), having an arch therein located in position to clear the row of stalks adjacent to the row acted on by the cutter, of a forked tongue having an arched brace, substantially as and for the purpose specified specified. 3rd. In a cutting apparatus having a circular cutter, a driven driven revolving peripherally notched wheel having a hook shaped holding notes. holding notches, whereby said wheel operates as a feed wheel in carrying them, subcarrying stalks to position for cutting and in severing them, substantially as described. 4th. In a corn harvester, the combination with a circular cutter  $\mathbf{H}^1$ , of a notched feeding wheel H, having an open bottomed groove  $h^1$ , in its periphery to receive the cutter, substantially as and football of the line acorn harvester, Stantially as and for the purpose specified. 5th. In a corn harvester, the combination, with a circular cutter  $\mathbf{H}^1$ , of a notched feeding wheel  $\mathbf{H}$ , having an open bottomed groove  $h^1$  in its periphery, said wheel being open or provided with a notched rim and supporting the on its underside contexticity as and for the purpose specified. wheel being open or provided with a notched rim and supporting ribs on its underside, substantially as and for the purpose specified. In a corn harvester, the combination, with the arms L L<sup>1</sup>, of chains M M<sup>1</sup>, having inward projections  $m^i$  and upward projections  $m^i$  for gathering inclined or fallen stalks, substantially as specified. In a corn harvester, the combination, with the inclined gathering arms, of frames N N<sup>1</sup> swinging horizontally in rear of said arms, substantially as and for the purpose specified. Sth. In a corn harvester, the combination, with a gathering arm L and a frame swinging horizontally in rear thereof, of a star wheel secured on said arm a point opposite or nearly opposite the forward end of the frame at a point opposite or nearly opposite the forward end of the frame at a point opposite or nearly opposite the forward end of the frame N and having its arms or points extending into the stalk passage, substantially as and for the purpose specified. 9th. In a corn harvester, the combination, with gathering arms L L', and frames N N', swinging horizontally in rear thereof, of springs O O' pressing the frames N N' toward each other and automatically varying the space between and for the purpose the frames N N¹ toward each other and automatically varying the space between said frames, substantially as and for the purpose specified. 10th. In a corn harvester, the combination of springs of the space between said frames swinging horizontally in rear thereof, automatically varying the space between said frames, and guides for the purpose specified. 11th. In a corn harvester, the combination with the bed frame of the harvester, of vertical shafts b, b¹, uprights c, brackets d¹, caps k, k¹, gathering arms L, L¹, supported on action with the second consistence. uprights c, brackets  $d^1$ , caps k,  $k^1$ , gathering arms L, L<sup>1</sup>, supported consaid caps, and braces l, substantially as specified. 12th. In a corn harvaster the corn barvaster l, the corn barvaster l, supported corn barvaster l. corn harvester, the combination with a circular rotating cutter and a rotating the combination with a circular rotating cutter and gearing a rotating feed wheel of the two elevator chains F, F1, and gearing for booking feed wheel of the two elevator chains F, F1, and gearing for Positively driving the cutter and the feed wheel respectively, from the cutter and the feed wheel respectively. from the separate elevator chains, substantially as specified. 13th. In a corn harvester, the combination with the cutting apparatus

composed of the feeding wheel and circular cutter and the cylinder I,  $I^1$ , located above the cutting apparatus, of the guides p,  $p^1$ , extended backward between said cylinders, substantially as and for the purpose specified. 14th. In a corn harvester, the combination of the gathering arms L, L<sup>1</sup>, the endless chains M, M<sup>1</sup>, moving in opposite directions on the opposite sides of said arms, the vertical shafts  $b,\,b^1$ , the feed disc H, and circular cutter H<sup>1</sup>, mounted on the lower ends of said shafts, the gear wheels K, on the upper portions of said shafts, the caps k, attached to the upper ends of the arms I., L<sup>1</sup>, at the tops of the shafts, the pinions j, and the shafts  $j^*$ , having sprocket wheels for the endless chains, substantially as shown naving sprocket wheels for the endless chains, substantially as shown and described. 15th. In a corn harvester, the combination, with the elevating frame and carrier, of the latterly adjustable curved springs S, located above the carrier, said springs being secured at both ends to give an even pressure on the stalks and having at one end an adjustable connection to vary their tension on the carrier, substantially as shown and described. 16th. In a corn harvester, the combination, with the clavating frame and carrier of the the combination, with the elevating frame and carrier, of the springs S, located above the carrier and attached at both ends and having free-ended branch springs s, attached thereto and extending over the binder table, substantially as and for the purpose specified. 17th. In a corn harvester, the combination of an inclined receiving platform, the elevating chains, a cutting apparatus arranged across the line of travel in front of the lower part of said platform, the receiving plate  $g^i$ , between said cutting apparatus and platform to support the butts of the cut stalks, and the armed collar  $i^i$ , supsupport the butts of the cut stalks, and the armed collar  $i^1$ , supported above and adjacent to the cutters, to force the stalk butts back while supported in a vertical position on the receiving plate, substantially as described. 18th. In a corn harvester, the combination, with the platform R, a cutting apparatus in front of said platform, and the gathering arms L, L<sup>1</sup>, of the broad curved shields Q, Q<sup>1</sup>, supported by the upper ends of said arms above the cutting apparatus and extended rearwardly and downwardly over the platform, and the supports t,  $t^1$ , for guiding the tops of the falling stalks, substantially as shown and described. 19th. In a corn harvester, the combination, with the shield Q, and support t, of the narvester, the combination, with the shield Q, and support t, of the yielding guide v', projecting downwardly and inwardly from the support t, substantially as and for the purpose specified. 20th. In a support t, substantially as and for the purpose specified. 20th. In a corn harvester, the combination, with the cutter and the gathering arms L, L<sup>1</sup>, of the swinging frames N, N<sup>1</sup>, having guides z, z<sup>1</sup>, substantially as and for the purpose specified. 21st. In a corn harvester, the combination of the inclined gathering arms L, L<sup>1</sup>, beging the totaled chains and the harmontally surface. having toothed chains, and the horizontally swinging frames N, N, having toothed chains, with the star wheel P, having arms projecting into the stalk passage, substantially as and for the purprojecting into the stalk passage, substantially as and for the purpose described. 22nd. In a corn harvester, the combination, of the inclined gathering arms L, L¹, having toothed chains, and the horizontally swinging frames N, N¹, having toothed chains, with the cylinders I,  $1^1$ , J,  $J^1$ , and the rotary cutting apparatus, substantially as and for the purpose specified. 23rd. In a corn harvester, the combination of the inclined gathering arms L, L¹, having chains M, M¹, the horizontally swinging bars or frames N, N¹, chains n, and cylinders I,  $1^1$ , J, J, in the cutting apparatus, guides for the falling stalks, and an elevator, substantially as and for the purpose specified. 24th. In a corn harvester, the forwardly and downwardly projecting gathering arm L, and a chain guard m, on the outer edge thereof, projecting above the plane chain guard m, on the outer edge thereof, projecting above the plane of the arm, in combination with a gathering chain having upward and outward projections passing downward through said guard and upward on the inner side of the arm, substantially as and for the purpose specified.

## No. 42,594. Sash Weight. (Contre-poids de croisée.)

Dennis P. Slattery, assignee of William D. Rinehart, both of St. Louis, Missouri, U.S.A., 13th April, 1893; 6 years.

Claim.—1st. As a new article of manufacture, a sash weight composed of iron chips or turnings, and any suitable cementing or adhesive material for cohering or sticking said chips together, substantially as set forth. 2nd. In a sash weight composed of iron substantially as set forth. 2nd. In a sash weight compactor, chips or turnings, sal ammoniac, water, plaster of paris, litharge and sulphur, substantially as set forth. 3rd. As a new article of manufacture, a sash weight composed of 96 parts of iron chips or turnings, surprior, substantially as set forth. Order the parts of iron chips or turnings, one part sal ammoniac, one half part of water, one part plaster of paris, one half part litharge, and one part sulphur, substantially as set forth. 4th. As a new article of manufacture, a sash weight comprising iron chips or turnings, cementing material for cohering said chips together, and a suspension wire 2 located centrally in said weight, substantially as set forth. 5th. As a new article of manufacture, a sash weight comprising iron chips or turnings, cementing material for cohering said chips together, and a suspension wire 2 provided with eyes 4, a bend 3 located centrally in said weight, substantially as set forth. 6th. As a new article of manufacture, a sash weight composed of 96 parts of iron chips or turnings, one part sal ammoniac, one-half part of water, one part of plaster of paris, one-half part of litharge, one part sulphur, and a suspension wire 2 provided with a bend 3, and eyes 4, substantially as set forth. 7th. The herein described method of making sash weights, which consists first in taking mold of suitable material and form provided with a plunger having a concave head, second, in taking iron chips or plunger having a concave head, second, in taking iron chips or filings, sal animoniac, water, plaster of paris, litharge and sulphur and mixing the same together, thereby filling said mold with said