

HAY PRESS.

Patented July 8, 1913.

7 SHEETS--SHEET 1.

1,066,467.



Fig. 1

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HAY PRESS.

APPLICATION FILED DEC. 27, 1912.

1,066,467.

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7 SHEETS—SHEET 2.

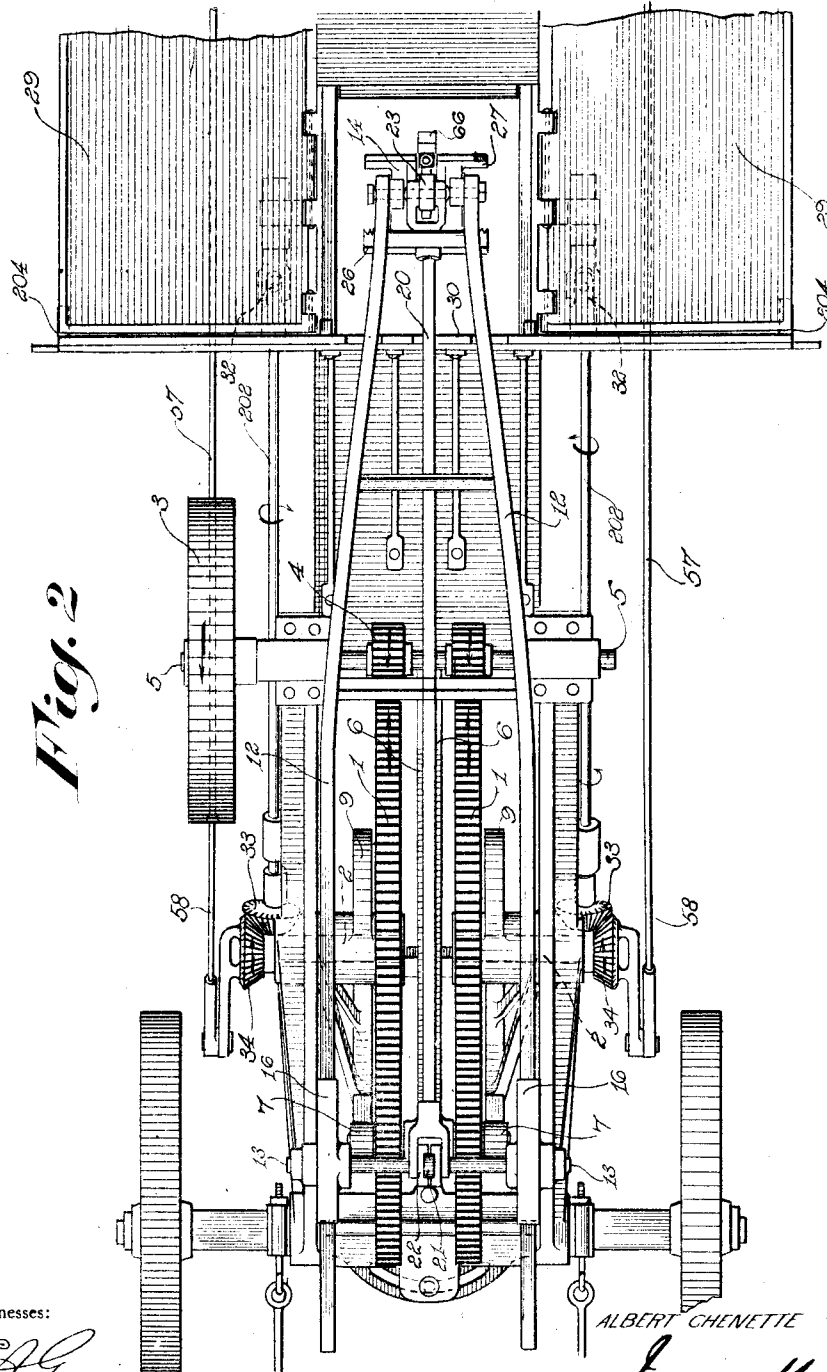


Fig. 2

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APPLICATION FILED DEC. 27, 1912.

Patented July 8, 1913

7 SHEETS-SHEET 3.

1,066,467.

Fig. 3

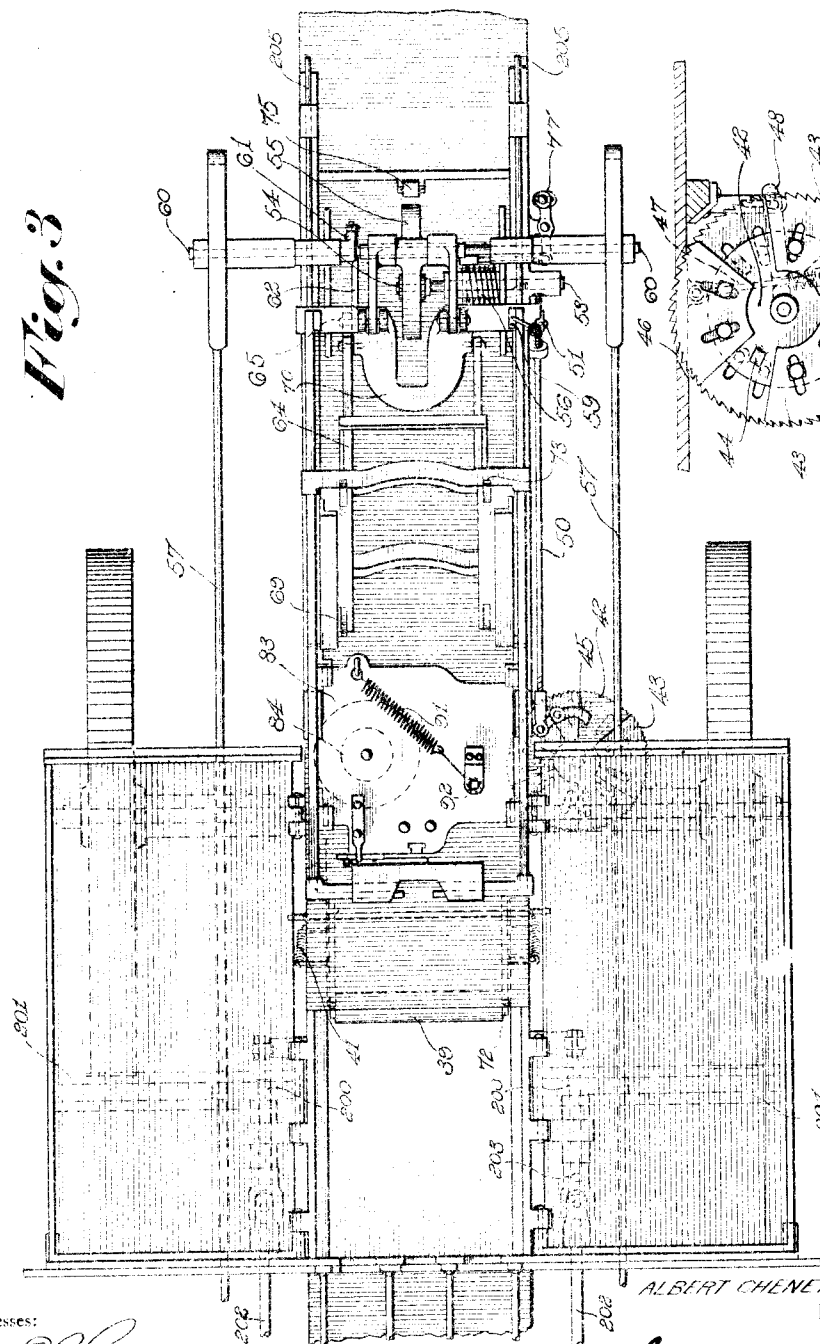


Fig. 4

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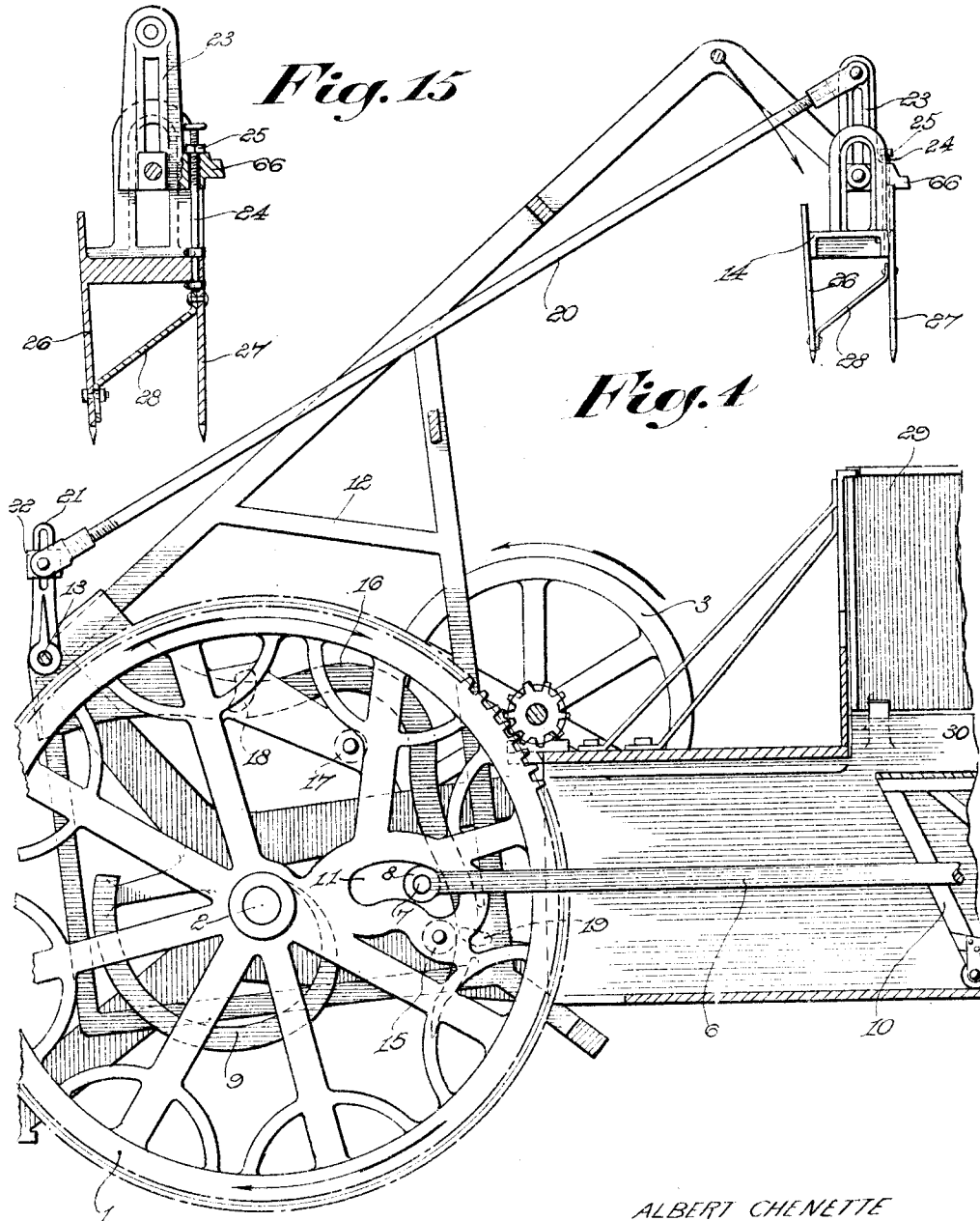
HAY PRESS.

APPLICATION FILED DEC. 27, 1912.

Patented July 8, 1913.

7 SHEETS—SHEET 4.

1,066,467.



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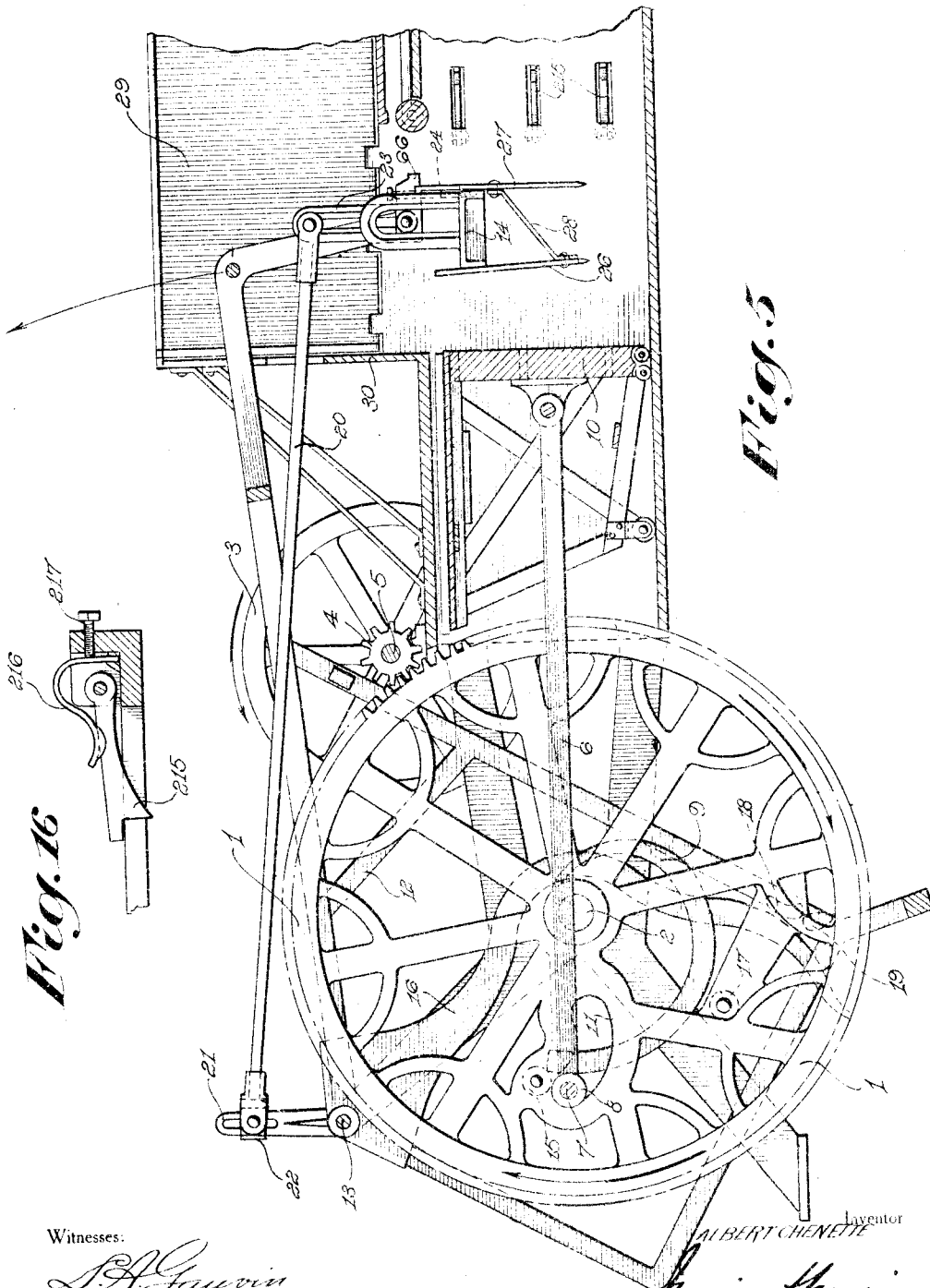
HAY PRESS.

APPLICATION FILED DEC. 27, 1912.

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7 SHEETS—SHEET 5.

1,066,467.



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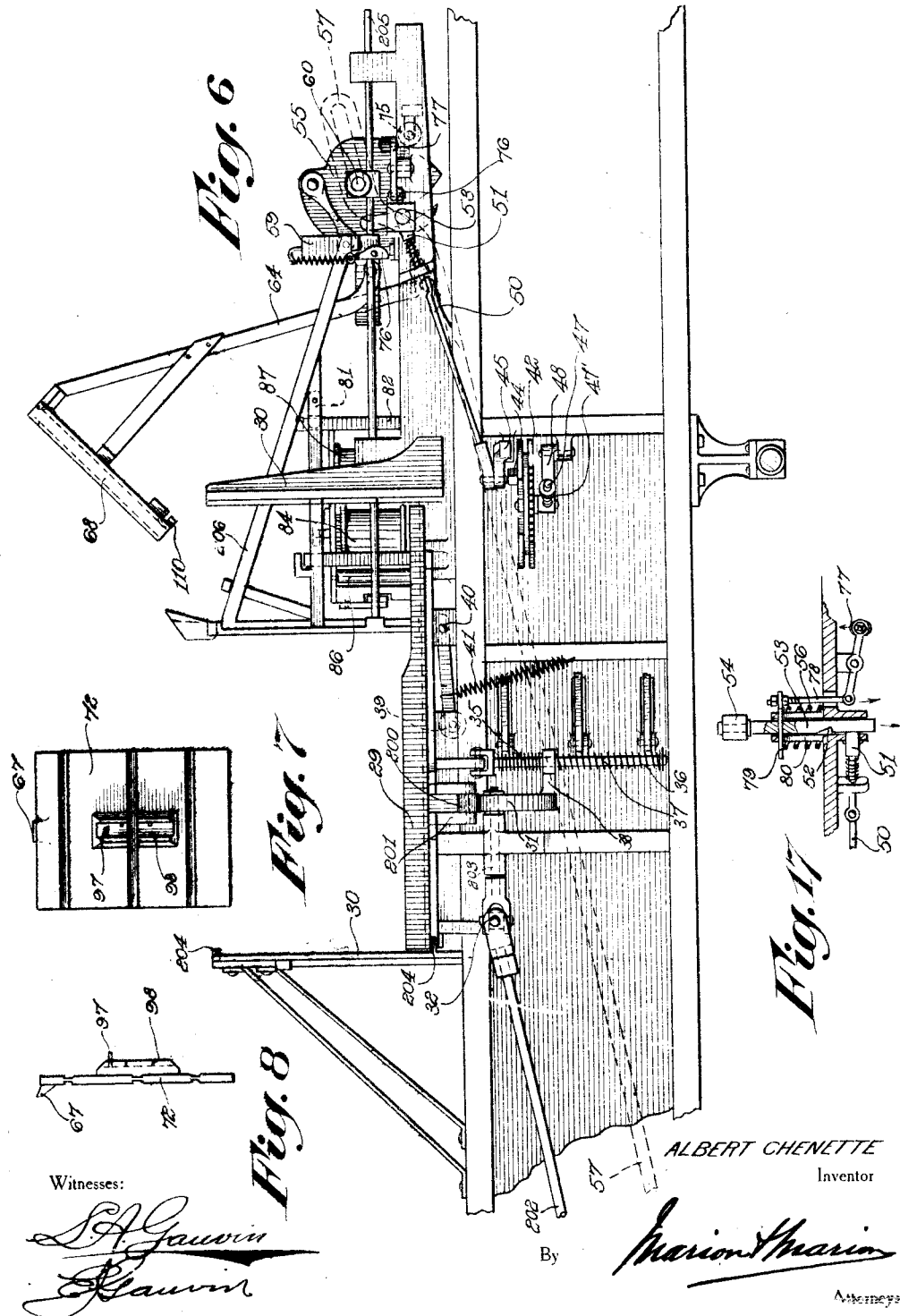
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UNITED STATES PATENT OFFICE.

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HAY-PRESS.

1,066,467.

Specification of Letters Patent.

Patented July 8, 1913.

Application filed December 27, 1912. Serial No. 733,329.

To all whom it may concern:

Be it known that I, ALBERT CHENETTE, a subject of the King of Great Britain, residing at St. Ours, Province of Quebec, Canada, have invented certain new and useful Improvements in Hay-Presses; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention to be hereinafter described relates to hay presses.

In order to more clearly disclose the construction, operation, and use of the invention, reference should be had to the accompanying drawings forming part of the present application.

Throughout the several figures of the drawings like reference characters designate the same parts.

In the drawings: Figure 1 is a side elevation of the invention, complete; Fig. 2 is a top plan view of the left hand half of Fig. 1; Fig. 3 is a like view of the remainder; Fig. 4 is a central, vertical, longitudinal, cross section of Fig. 2, with the compression plunger at rest; Fig. 5 is a similar view with the compression plunger in operative position; Fig. 6 is a side elevation of Fig. 3; Fig. 7 is a rear view of a separator board; Fig. 8 is an edge view of the same; Fig. 9 is a side elevation of the mechanism for positioning the separator board; Fig. 10 is a top plan of the label feeding and planing mechanism; Fig. 11 is a left hand end view of the same; Fig. 12 is a detail view showing the jaws of the label guides and the label delivering device in inoperative positions; Fig. 13 is a fragmentary view of one of the lower retaining springs for the separator board; Fig. 14 is an enlarged top plan view of the bale length regulating device; Fig. 15 is an enlarged, central, vertical, longitudinal, cross section through the head 14, showing the adjusting means; Fig. 16 is an enlarged side elevation of one of the hay retaining clips; Fig. 17 is a plan view of the slidable cam operating roller and its actuating mechanism; Fig. 18 is a fragmentary view of one of the lower retaining springs for the separator board; and Fig. 19 is an end view of the frame contracting devices.

The main objects of the invention are to provide a simple, efficient, economical, dura-

ble, and compact machine which will automatically feed hay and compress it into a bale; together with adjustable means for regulating the length of bales by actuating the mechanism for inserting the bale separating board, and means for feeding, planing, delivering, printing, and attaching a label to a completed bale.

The press body or frame is constructed as usual and is mounted or supported on wheels, two four armed brackets being secured to the forward end of the press body to act as supports for various elements, as will later appear. In each of these brackets is journaled a short shaft 2 to which is fixed a large gear wheel 1 provided with a plate having an arcuate slot 11 about midway between the center and the circumference of the wheel and extending radially thereof. The aligned slots 11 slidably receive a cross head or bar 7 in the end of the piston rod 6 which is pivotally connected to the compression plunger 10. The lower end of this plunger is slidably supported on the bottom of the press body by means of antifriction rollers journaled both in its front and in its rear end. Rotation of the gears 1 will, of course, cause reciprocation of the compression plunger 10. Rotation of the gears is effected by pinions 4 fixed to a shaft 5 which is driven through a belt wheel or friction pulley 3. When in operation, the expansive action of the hay under compression will force the cross head 7 to the inner ends of the slots 11. Continued rotation of the gears 1, from such position, will draw the rod 6 and plunger head 10 toward inoperative position. As the gears rotate, cams 9 will engage the cross head 7 and gradually force it outwardly in the slots 11, thereby increasing the speed and extent of the rearward movement of the rod 6. The cams are so arranged as to have their maximum effect as the rods 6 and plunger head 10 reach the end of their outward travel. At this point the cross head 7 escapes from the cams—see Fig. 5. As the gears 1 rotate from this point, the rod 6 and plunger head 10 will be gradually forced forward, the cross head 7 riding in the outer end of the slots 11 until the slots extend vertically above the shafts 2. At this point, the cross head 7 will drop to the lower or inner ends of the slots 11, thereby getting increased power from the gears 1 for the compression stroke. The next 90° of rotation effects

compression, and the rod 6 with compression plunger 10 is then retracted, as previously described.

It is essential to feed the hay into the body of the press in advance of each compression stroke of the plunger 10. For this purpose, a pair of spaced, connected, substantially rectangular frames 12 are pivotally suspended pendulumwise from a small cross shaft 13 which is fixedly mounted in an upper arm of each of the aforementioned four armed brackets, and from each frame 12 extends a long L shaped beam, the two beams converging toward each other from their fixed toward their free ends and carrying in their free ends a rod or small shaft on which are mounted bearing blocks in which are slidably mounted two U shaped, parallel, supporting and guiding yokes of the feeding plunger head 14. This head is adjustably connected by a rod 24 to a base projecting from a U shaped yoke 23 which has its lower end slidably secured to the cross shaft above referred to. The lower end of rod 24 is journaled to rotate freely in the head 14 but is provided with shoulders or collars adapted to prevent longitudinal movement in either direction relatively to the head. The upper end is threaded through the projecting base of the yoke 23 and may be provided with a stop nut 25 to limit its travel. Rotation of rod 24 will, of course, cause the head 14 to move either toward or from the projection through which the rod is threaded. To the head 14 are secured two blades 26 and 27 having lower serrated or toothed edges adapted to engage the hay and feed it downwardly into the body of the press. These are connected and braced in spaced relation by means of a diagonally arranged leaf spring 28 and the blade 26 is made slightly yielding so that it will yield a bit in case the compression plunger 10 will engage this blade just as the head 14 is rising or a second before. This slight yielding of the jaw 26 prevents any possibility of breakage. It is necessary, of course, to have the head 14, with its blades 26 and 27, maintained in vertical position during its operation. To that end, a tie rod 20 is pivotally connected at its opposite ends, respectively, to the top of yoke 23 and to a bearing 22 which is slidably adjusted on a slotted arm 21 fixed to shaft 13. Thus, the arc of swing of the outer end of the tie rod 20 may be so adjusted, relatively to the arc of swing of the outer ends of the L shaped beams, as to practically nullify the same, keep the head 14 and blades 26 and 27 in an exact vertical position as they rise and fall. In order to rock the frames 12 to cause the downward swing of the head 14, a lug 19 is provided on each frame and is adapted to be engaged by a cooperating lug 18 on each of the gears 1.

The lugs are so positioned that 18 will engage 19 shortly after the compression plunger 10 has started on its rearward travel. Thus, the downward movement of the head 14 is started shortly after the rearward movement of the compression plunger 10 has started, as will be evident on reference to Fig. 4. The arc through which the lug 19 travels is struck from a greater radius than that of the arc through which the lug 18 travels. Consequently, as the gears 1 continue rotation after engagement of lugs 18 and 19, the lugs 18 will gradually escape from the lugs 19 and leave the frames 12 free to be raised. The point of escapement, however, is so timed that it will not occur until the plunger head 14 has reached its lowermost position. Likewise, this point is so determined that it will occur just as the cross head 7 is reaching the high points of cams 9, with the plunger head 10 in its most retracted position, all as clearly shown in Fig. 5.

When the head 14 has been forced down to feed the hay into the press body, as above described, it is necessary, of course, to immediately raise it out of the path of the advancing compression plunger head 10, and maintain it in raised position until the head 10 has completed its compression stroke and is again being retracted. For the purpose of thus raising the head 14, a roller 15 is provided on each of the gears 1 and is adapted to engage a cooperating irregular cam plate 16 extending diagonally across each of the frames 12. This engagement takes place just shortly after the cross head 7 escapes from the high points of cams 9, soon enough to permit the rising movement to carry the head 14 and plate 26 clear of the compression plunger head 10 as it begins its forward travel, as will be clear on reference to Fig. 5. Continued rotation of gears 1, after engagement of rollers 15 with their respective cam plates 16, will cause the gradual upward swing of head 14, to the position of Fig. 4. But it is necessary to maintain the head 14 in this raised position for some time, as previously stated. For this purpose, an additional roller 17 is provided on each gear 1. These rollers are adapted and arranged to engage the cam plates 16 at the instant that the head 14 has reached the limit of its upward travel. As they engage the cam plates, the rollers 15 approach enlargements or elbows of the cam plates and due to the space between the rollers 15 and cam plates at such points, become temporarily disengaged from the cam plates, and inoperative. During this disengagement, the rollers 17 travel in contact with the cam plates 16 and maintain the head 14 raised, until the rollers 15 have crossed the elbows and again engaged the cam plates 16. As the rollers 15 make this second contact, the

rollers 17, traveling in the same path as rollers 15, reach the elbows and become temporarily inoperative. The cam plates 16 are so patterned that this continued contact of rollers 15 simply acts to maintain the head 14 raised without raising it any farther. As the rollers 15 are about to escape from the lower ends of the cam plates 16, the rollers 17 make their second contact with the cam plates 16 and continue the supporting action of rollers 15. As rollers 17 pass from the lower ends of the cam plates 16, the head 14 will be free to swing down by gravity until it engages the hay, and the lugs 18 and 19 will then force it down for the rest of its stroke—all as clearly shown in Figs. 4 and 5.

At the edges of the feed opening of the press body are pivotally mounted two swinging hopper sides or boards 29 which, when in vertical position, cooperate with end members 30 to form a hopper mouth. When in horizontal position, these sides act as tables to receive hay which is to be fed into the press body. When raised vertically, they carry the hay outwardly above the feed opening and form a hopper mouth through which the head 14 forces the hay to the interior of the press body. Therefore, it is necessary to provide means for swinging the sides 29 upwardly just prior to the downward movement of the head 14, and swinging them downwardly to horizontal position just prior to the upward movement of the head 14. For this purpose, a small antifriction roller 200 is journaled in a pair of brackets 201 projecting from each of the sides 29 and adapted to be engaged and operated by an eccentric 31 fixed to a small shaft 203 journaled in suitable bearings on the press body and connected by a universal coupling 32 to a shaft 202 provided with a bevel pinion 33 which meshes with and is driven by a like pinion 34 fixed to each of the shafts 2. Thus, as the gears 1 rotate to operate the feeding and compressing mechanisms, the sides 29 will be alternately raised and lowered. The lowering, of course, is simply due to the weight of the doors and is gradual, due to the traveling engagement between the rollers 200 and eccentrics 31. Suitable stops 204 are provided on the end members 30 to engage the sides 29 and limit their swing toward and from the horizontal and vertical, respectively. To prevent any possible shock as the doors reach their respective positions, buffers are provided. These comprise rods 37 slidably mounted in brackets 38 of the press body and pivotally connected to lugs or ears projecting from the doors 29. About these rods and on either side of the brackets 38 are arranged shock absorbing coil springs 35 and 36, the operation of which will be obvious on reference to Fig. 1.

One objection to hay presses of this general type is the crushing and breaking of the hay as it engages the rear upper edge of the feed opening during the compression stroke. Likewise, this causes a considerable binding or wedging action which considerably increases the power required to operate the machine. To avoid this objection, a hay tucking device is provided, comprising a pair of arms pivotally mounted on a small transverse rod 40 and carrying in their outer ends a freely revoluble tucking roller 39. As shown in Figs. 3 and 5, the roller 39 extends completely across the feed opening and projects slightly in front of the rear edge of the opening. In this position, it will engage the hay in advance of the edge of the opening and roll or tuck it down to prevent binding. Being freely revoluble, the roller offers no appreciable resistance. Coil springs 41, connected at their opposite ends, to the arms and to the walls of the press body, give a strong yielding downward pressure to the roller 39, as will be evident.

The bale length regulating mechanism and several correlated elements are disposed, mostly, to the rear of the feed opening of the press body. Suitable guide rods 205 slidably mounted in posts on the press body carry an open triangular frame 206. To the rods 205 are fixed bearing blocks in which is journaled a transverse shaft 60 to the ends of which are slidably connected the ends of pitman rods 57 which are connected to cranks 58 fixed to bevel gears 34 which are fixed to and rotate with the shafts 2—see Figs. 1 and 2. Preferably, this sliding connection is by means of slots in the enlarged ends of the rods 57. The result of this arrangement is that at each revolution of the gears 1 the triangular frame 206 will be reciprocated toward and from the feed opening of the press body. To this shaft 60 is fixed a cam 55 provided with an arcuate notch in one side for a purpose to be later disclosed. To the cam is pivotally connected one end of a link 207 the opposite end of which is similarly connected to block 59 slidably mounted on the guide rods 205 and provided with a rearwardly extending U shaped yoke 70. To the block 59 are solidly secured the side members of the triangular frame 206. Consequently, as the cam 55 is rotated in a clockwise direction, as will later appear, the frame 206 will be drawn toward the right, in Fig. 9. Within the frame 206 is pivotally mounted a second triangular frame 64. The lower ends of the side members of this frame are off set as elbows and are pivoted to yoke 70 where it joins the block 59. To one of these elbows is fixed one end of a second oppositely directed elbow 63, the two, with their pivot 65, forming practically a bell crank lever.

To the lower end of elbow 63 is pivotally connected one end of a link 62. The other end of this link is screw threaded to be turned into a threaded bore in the end of a crank arm 51 which is fixed to the shaft 60 and therefore must rock with the cam 55 as the cam is rocked. The threaded connection provides adjustment for the operative length of the link 62, of course. As the link 207 draws the block 59 toward the right, the link 62 forces the frame 64 to swing upwardly on its pivot 65. Since the frame 64 is pivoted to the yoke 70, the movement of the yoke 70 toward cam 55 and link 62 aids in lifting the frame 64. Thus, both links act to lift the frame 64, the action of link 207 being indirect. In the free end of the frame 64 are provided parallel guides 68 adapted to receive bale separating boards 72. In the side wall of each, near the lower end, is arranged a leaf spring 69 adapted to engage the edge of the block 72 and hold it, yieldingly, against accidental withdrawal. Spring catches 73 are similarly placed in the upper ends to prevent the block from being thrown out as the frame 64 is swung to the extreme of its inoperative position. Each block 72 is provided with a projection 67 adapted to be engaged by a cooperating projection 66 on the yoke 23 of the feeding plunger mechanism. This engagement will drive the separator board 72 into position at the end of a completed bale. The sliding connection between rods 57 and shaft 60 permits the cam operation during the reciprocation of frame 206.

It is essential, of course, to have the separator board driven into position only upon the completion of a bale, and not before. To that end, the following mechanism has been provided: At the point where the formation of the bale begins, one side wall of the press body is provided with a horizontal slot adapted to receive the edge of serrated or toothed sectors 43 which are carried by a disk 42, and connected to the disk by slots and bolts so that they may be adjusted radially thereof to increase or decrease the toothed circumference, as may be desired. This toothed edge extends slightly within the press box and engages the face of the bale. As the bale passes through the press body this engagement will cause rotation of segments 43 and disk 42. Each complete rotation of disk 42 will cause operation of the frame 64 for inserting the bale separating board, thus determining the length of the bale, all as will later appear. Consequently, by radial adjustment of the segments 43, the length of the bale may be regulated as desired. The disk 42 is freely journaled about a pin or stud projecting from one end of a supporting arm 48 pivoted to the body of the press. It is held in operative position by a coil spring 47' on a rod 47, one end

of which is pivoted to the press body while the opposite end is passed through a bore in the rod 48 and provided with a washer, between which and the rod 48 the spring is compressed. From the upper face of the disk 42 a lug 44 projects. This lug engages one end of a lever 45 fulcrumed in a small bracket projecting from the side wall of the press box. To the other end of the lever is pivotally connected a rod 50 to the upper end of which is pivotally connected a short link which is slidably mounted in a suitable guide on the press frame and which is provided with a wide tapered head 51 adapted to be seated in the notch 52 of a spring actuated pin 53 carrying a roller 54. A coil spring interposed between this head 54 and the guide, acts to force the tip 51 to operative position as the notch 52 is moved into position. It is moved into position automatically by a trip 76 pivotally mounted on the block 59 and held in operative position by a spring. As the block 59 travels back with frame 206, as previously described, the trip 76 will engage one end of a lever 77 which is fulcrumed in a suitable bracket on the press side, and cause it to rock. This lever is connected by a link 78, to a cross bar 79 which is fixed to the pin 53 and travels in guide slots 80 in the sleeve through which the pin 53 slides. As the lever is rocked, the pin will be drawn in the direction of the arrows (Fig. 17) until notch 52 falls opposite and receives the tip 51. During this movement, the actuating coil spring 56 will be compressed between the cross bar 79 and the press frame, of course. As soon as the tip 51 is withdrawn by the action of lug 44 on lever 45, the pin 53 will be driven forward by the action of its spring 56, as will be clear. This release, which is effected by the bale length regulating means, occurs at the end of the last compression stroke which finishes the bale, as will be evident. Likewise, at the same time that the release is effected, the frame 206 and attached parts will be in its rearward position, or, at its greatest distance from the feed opening, and the cam 55 will be in a position 180° clockwise rotated from its position in Fig. 9. The released pin 53 will then seat the roller 54 in the arcuate notch of the cam 55. Now, as the frame 206 starts its return movement toward the feed opening, the pin 53 and roller 54 being stationary, cause the roller 54 to engage the curved end wall of the arcuate slot and rock the cam 55 in a counter clockwise direction, as will be evident on reference to Figs. 6 and 9. Fig. 6 shows the cam in its midway position and Fig. 9 in its completely rotated position. It will be noticed that in Fig. 6 the frame 64 has been swung forward through an arc of about 90° and that in Fig. 9 it is swung to a position diametrically opposite to its starting posi-

tion and holds the separating board 72 ready for insertion at the end of the completed bale. Thus, it will be seen, that the frame 64 is operated entirely by the cam 55 and therefore is swung to and from operative position at the completion of a bale, only—by engagement of roller 54—whereas, the frame 206 reciprocates with each reciprocation of the compression plunger. On the return movement starting from the position of Fig. 9, the roller 54 will engage the end wall of the arcuate notch of cam 55 and cause it to rock toward its original position. As the rocking motion continues, the roller 54 will engage the lower wall of the notch and continue to rock the cam until the rocking movement withdraws the notch from the roller. At this point, a second stationary roller 75, fixed to the press frame, will engage the opposite face of the point of the cam and cause it to complete its swing of 180°, carrying the frame 64 and guides 68 to the original position to receive another separating board. As the frame 206, with block 59, moves toward the right in Fig. 6, the trip 76 will engage the end of lever 77 and will draw the pin 53 and roller 54 from operative position, as previously described. Thus, the next movement of the frame 206 will not cause operation of the cam 55. Nor will any succeeding movements of the frame 206 cause operation of the cam 55, until a bale has been completed.

At the time that a separating board is placed between the adjacent ends of two bales, a bale labeling mechanism is brought into play. This mechanism is carried in a frame 83 which is removably held in the frame 206 by means of front and rear hooks 82, and rear turn buttons 81. The front hooks are adapted to slip over side members of the frame 206 and the rear hooks receive the turn buttons 81. Limit pins 208 are provided to prevent downward rotation of the turn buttons beyond the horizontal position. Thus, the frame 83 is suspended within the frame 206. Within the frame 83 is journaled a pin 93 on which is fixed a feed spool 84 about which extend two concentric coils of a flexible tape 85, spaced apart by a column of small wooden labels 95. The outer coil is a continuation of the inner coil, of course, the tape being simply passed across the inner end of the column and brought back parallel with the inner coil. This tape is then led forward from the spool to the rear of a label guiding jaw 96, thence about a guide roller 86, and finally connected to a winding drum 87 provided with a ratchet 209 which is engaged and held against rotation, in one direction, by means of a spring pressed pawl 94. A cord 92, connected to the shaft 93' of the drum 87 and wound thereabout, has its opposite end connected to one end of a tension spring 91, the opposite end

of which is made fast to the frame 83. The upper end of shaft 93' is suitably squared to receive a winding key. The spring is put under tension by winding in a direction opposite to the arrow in Fig. 10, after first disengaging the pawl 94. The pawl is then again engaged and when it is desired to feed the labels forward, it is only necessary to turn in a thumb screw 210 until the pawl is again disengaged. The tension of the spring 91 will then be exerted on the band 85. The opposite wall of the feed chute leading from the spool is formed by a rigid plate 88 pivoted at 89 and held in position by a spring 90. This plate, also, ends adjacent a fixed label guiding jaw 96 cooperating with the other jaw 96, as will more clearly appear on reference to Figs. 10 and 11. The jaws 96 are formed as L shaped members projecting slightly beyond the edges of the frame 83 and leaving a narrow open way between them. Thus, the outermost label will be held against the inner faces of the jaws 96, by friction only, and may be easily forced downwardly therefrom by a label delivering device hereinafter described. This foremost label will have its upper edge engaged by a lug 97 projecting from a recessed block 211 secured to one face of the separating board 72, as the board is forced downwardly at the end of a bale, as previously disclosed. As the label is delivered downwardly, in this manner, it engages the face of a marking roller 99 loose on one end of a shaft 100 which is fixed in one end of a lever which is fulcrumed in small brackets depending from the lower face of the frame 83. The opposite end of the lever is engaged by a leaf spring 101 which forces the roller to operative position. This roller marks the label and at the same time presses it tightly against a series of sharp pointed retaining teeth 98 which project from the recess of the block 211. In this way, the label will be positively secured to the block 211 and carried down with the separating board, and there will be no chance of its being dropped or lost after leaving the jaws 96. It will be noticed that the block 211 is so arranged on the separator board that one of the wire guiding grooves of the board crosses the back of the block, about midway of its length. At this point, the block is cut through as a continuation of the groove. Thus, when the label has been driven on to the pointed teeth 98, a wire inserted in the groove will lie between the board and label. So, when each bale is wired, in the usual way, a label will be bound to the end of the bale by the middle binding wire. The mark made by the roller 99 is on the face of the bale next to the hay and, therefore, not visible, of course. This mark is simply in the nature of an identification mark or the like and does not need to

be at all times in sight. It is necessary, of course, to return the roller to its initial position after each operation. For this purpose, a torsion spring 103 is coiled about the roller shaft and has its opposite ends connected to the shaft and to the under face of frame 83, respectively. As the roller is rotated by the downward movement of the label, the torsion spring will be wound up, and as the label passes beyond the roller, the roller will be returned by the wound torsion spring. A stop pin 102 is provided to limit the rotation of the roller in either direction.

The weight, quality, and like indications, are marked upon the face of the label opposite to that on which the mark is made by the roller 99. It is best, of course, to have a clean, smooth, fresh surface for this marking. To that end, a small planing device is provided and is adapted to plane a small space at about the center of the face of each label, just before it is fed from the guides 96. This comprises a small beveled planing knife or blade 104 adjustably connected to a plate slidably mounted in lateral guides 105. This knife travels through cut away portions of the guides 96 and engages the face of the label just sufficiently to plane off a very thin layer. To the plate carrying the knife is connected one end of a link 212, the opposite end being connected to the lower angle of a triangular plate 213. To a second angle of the plate 213 is pivoted a lever 108 having a lug 214 adapted to engage a lug 109 projecting from the third angle of the plate 213. This lever 108 is actuated by lug 110 on the lower edge of the frame 64, as frame 64 is swung to operative position. After operation, the knife is immediately returned to inoperative position by means of a link 107 and a leaf spring 106, as will be evident on reference to Fig. 11. A special construction of clip has been provided for preventing the return of hay after each compression stroke. This comprises a toothed dog 215, operated by a curved leaf spring 216, together with a set screw 217 for regulating the power of the spring.

For contracting the free ends of the pressed frame or body, the devices shown in detail in Fig. 19 have been provided. These devices comprise a pair of rods 218, a tie plate 219, cam levers 220, and operating nuts 221. The tie plates extend across beneath the lower frame member from one tie rod to the other, and each of the cam levers is fulcrumed on the upper projecting part of one of the rods, with its cam bearing on the top member of the press body, and its opposite end slidably mounted on the upper end of the other rod. The upper end of each rod is threaded and the nuts 221, when

turned down, engage the lever ends and force them to operative position. Preferably, the upper projecting portions of the rods 218 are pivoted to the other portions to permit them to be swung to position to pass through the bores or holes in the lever ends.

It is thought that the construction, operation, and use of the invention will be clear from the preceding detailed description.

Changes may be made in the construction, arrangement, and disposition of the several parts of the invention without in any way departing from the field and scope of the same, and it is meant to include all such within this application wherein only a preferred form has been disclosed.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a machine of the character described, a press body, a compression plunger slidably mounted therein, means for reciprocating said plunger, a frame slidably mounted on said press body, a second frame movably mounted therein and adapted to receive separator boards, means for reciprocating the first frame, means for operating said movable frame, and devices for actuating said means.

2. In a machine of the character described, a press body, a compression plunger slidably mounted therein, means for reciprocating said plunger, a frame slidably mounted on said press body, a second frame movably mounted therein and adapted to receive separator boards, a rotary cam mounted in the first frame, connections between said cam and the second frame, a rotary disk actuated by the passage of a bale through the press body, a rod, a pin engaged by said rod and provided with a roller adapted to engage and actuate the aforesaid cam, and means carried by said disk and adapted to withdraw said rod to inoperative position.

3. In a machine of the character described, a press body, a compression plunger slidably mounted therein, means for reciprocating said plunger, a frame slidably mounted on said press body, a second frame movably mounted therein and adapted to receive separator boards, a rotary cam mounted in the first frame, connections between said cam and the second frame, a rotary disk actuated by the passage of a bale through the press body, a rod, a pin engaged by said rod and provided with a roller adapted to engage and actuate the aforesaid cam, means carried by said disk and adapted to withdraw said rod to inoperative position, and means for withdrawing said pin to inoperative position.

4. In a machine of the character described, a press body, a compression plunger

ger slidably mounted therein, means for reciprocating the same, a frame slidably mounted on said press body, a second frame removably mounted in the first frame, label feeding mechanism mounted in said removable frame, a third frame pivotally mounted in the slidable frame, a separating board yieldingly retained therein and provided with means adapted to engage and deliver a label, and means for forcing said board into position.

5. In a machine of the character described, a press body, a compression plunger slidably mounted therein, means for reciprocating the same, a frame slidably mounted on said press body, a second frame removably mounted in the first frame, label feeding mechanism mounted in said removable frame, a third frame pivotally mounted in the slidable frame, a separating board yieldingly retained therein and provided with means adapted to engage and deliver a label, means for forcing said board into position, and means for marking said label as it is fed.

6. In a machine of the character described, a press body, a compression plunger slidably mounted therein, means for reciprocating the same, a frame slidably mounted on said press body, a second frame removably mounted in the first frame, label feeding mechanism mounted in said removable frame, a third frame pivotally mounted in the slidable frame, a separating board yieldingly retained therein and provided with means adapted to engage and deliver a label, means for forcing said board into position, means for marking said

label as it is fed, and means for attaching said label to said board as it is being marked.

7. In a machine of the character described, a press body, a compression plunger slidably mounted therein, means for reciprocating the same, a frame slidably mounted on said press body, a second frame removably mounted in the first frame, label feeding mechanism mounted in said removable frame, a third frame pivotally mounted in the slidable frame, a separating board yieldingly retained therein and provided with means adapted to engage and deliver a label, means for forcing said board into position, and means for planing said label immediately prior to its delivery.

8. In a machine of the character described, a press body, a compression plunger slidably mounted therein, means for reciprocating the same, a frame slidably mounted on said press body, a second frame removably mounted in the first frame, label feeding mechanism mounted in said removable frame, a third frame pivotally mounted in the slidable frame, a separating board yieldingly retained therein and provided with means adapted to engage and deliver a label, means for forcing said board into position, means for planing said label immediately prior to its delivery, and means for marking said label as it is fed.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ALBERT CHENETTE.

Witnesses:

E. J. GAUVIN,
S. A. GAUVIN.