

No. 611,121.

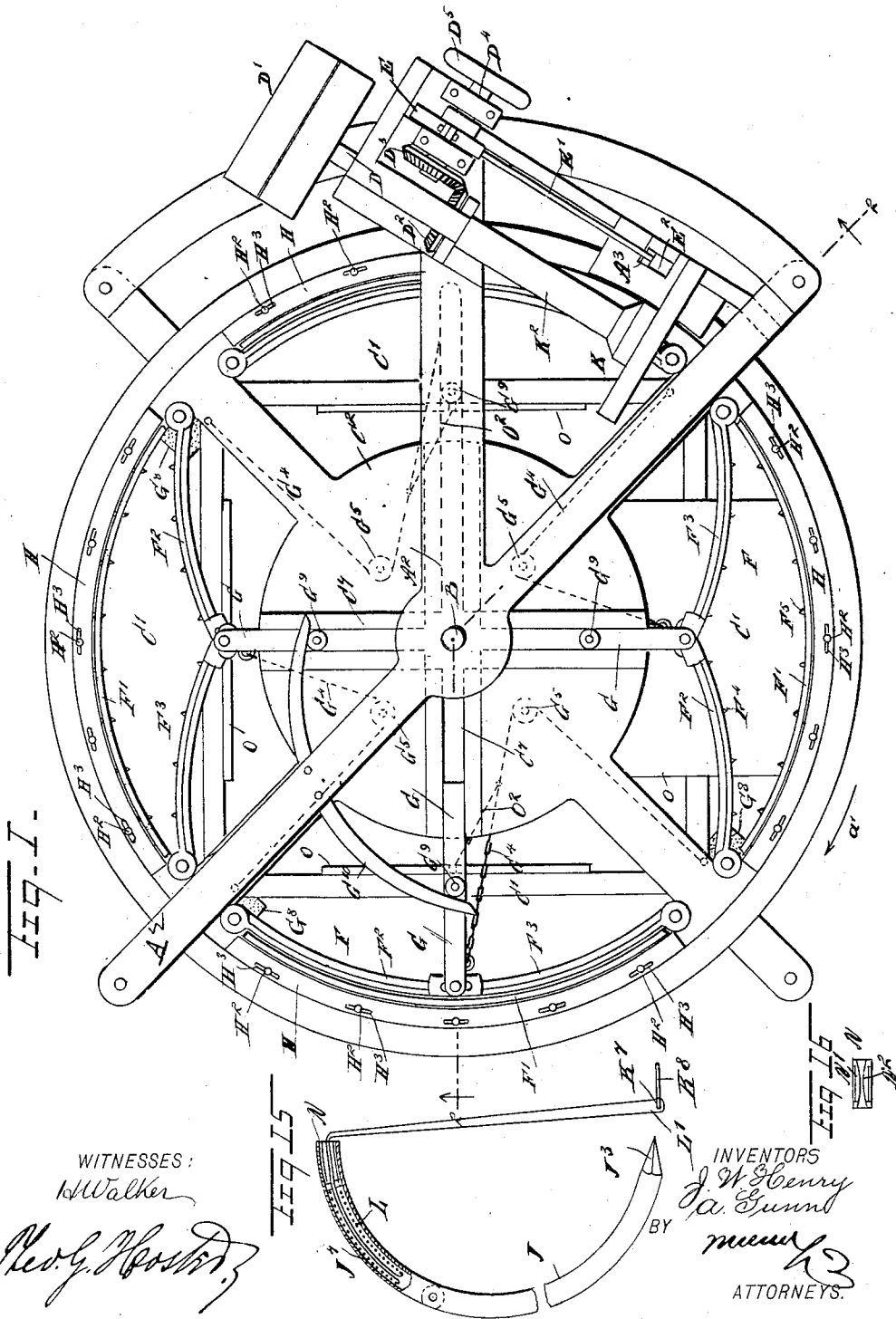
Patented Sept. 20, 1898.

J. W. HENRY & A. GUNN.
GRAIN BAGGING MACHINE.

(Application filed May 8, 1897.)

(No Model.)

4 Sheets—Sheet 1.



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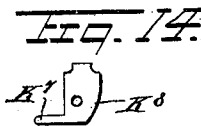
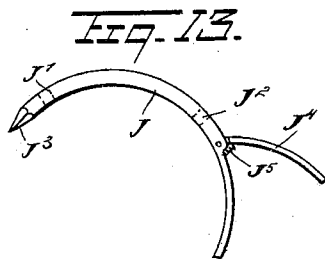
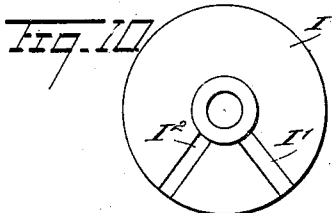
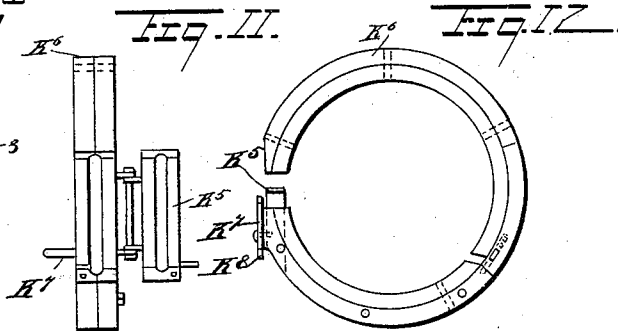
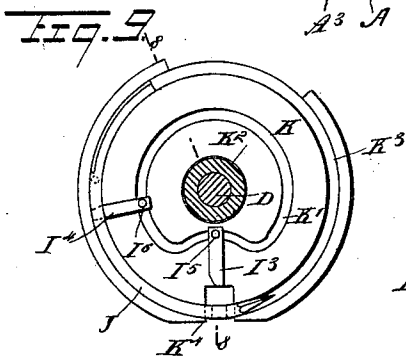
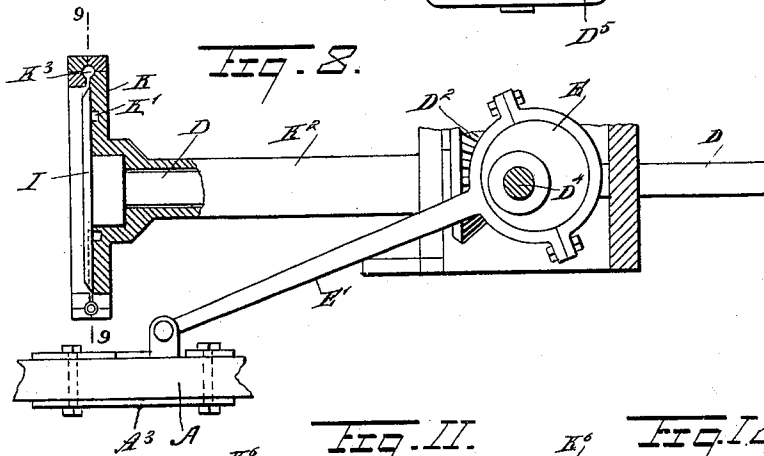
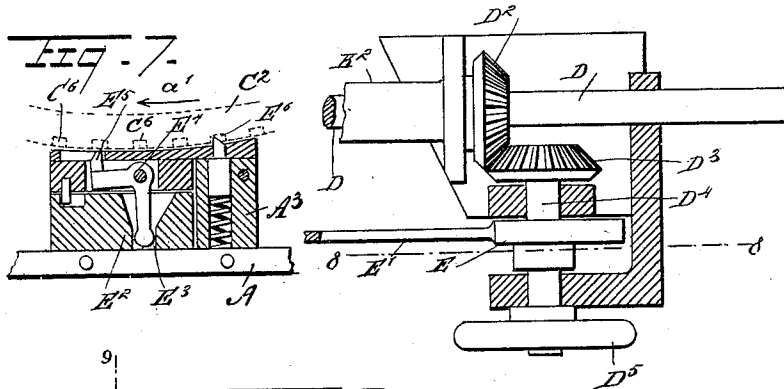
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4 Sheets—Sheet 3.



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4 Sheets—Sheet 4.

Fig 17

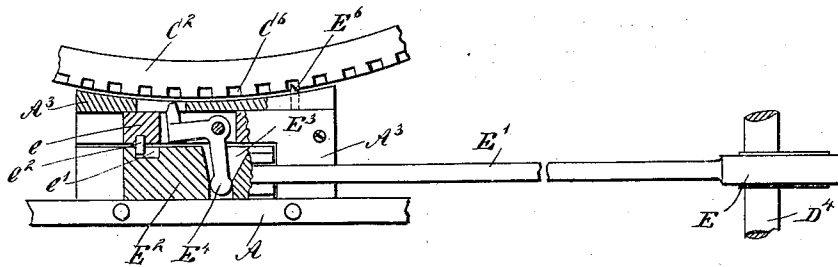


Fig 18

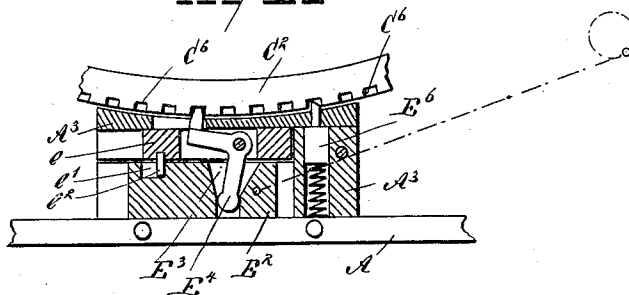


Fig 19

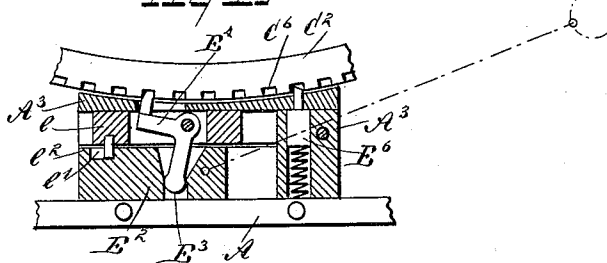
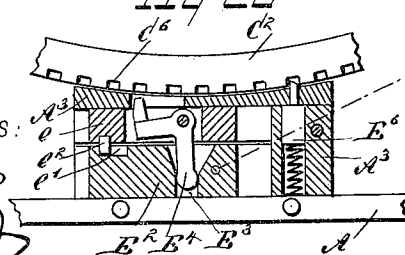


Fig 20



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UNITED STATES PATENT OFFICE.

JAMES W. HENRY AND ALEXANDER GUNN, OF WALLACE, IDAHO.

GRAIN-BAGGING MACHINE.

SPECIFICATION forming part of Letters Patent No. 611,121, dated September 20, 1898.

Application filed May 8, 1897. Serial No. 635,650. (No model.)

To all whom it may concern:

Be it known that we, JAMES W. HENRY and ALEXANDER GUNN, of Wallace, in the county of Shoshone and State of Idaho, have invented a new and Improved Grain-Bagging Machine, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved grain-bagging machine arranged to properly support and hold open an empty bag or sack during the filling operation, to close the open end of the bag by sewing after the bag is filled with the grain, and to finally discharge the filled and closed bag from the machine.

The invention consists of such parts and combinations as will be fully described hereinafter and then defined in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improvement. Fig. 2 is a sectional side elevation of the same on the line 2 2 of Fig. 1. Fig. 3 is an enlarged plan view of the segmental block carrying pins for holding the bag. Fig. 4 is an enlarged side elevation of one of the pins. Fig. 5 is an enlarged sectional side elevation of the device for moving the pins in and out on the jaws, the section being on the line 5 5 of Fig. 6. Fig. 6 is a plan view of the same with parts broken out and parts in section. Fig. 7 is an enlarged sectional plan view of the driving device for the bag-carrier and the sewing device. Fig. 8 is a sectional side elevation of the same, with parts in section, on the line 8 8 of Fig. 7 and the line 8 8 of Fig. 9. Fig. 9 is a sectional face view of the sewing device on the line 9 9 of Fig. 8. Fig. 10 is a face view of the driving-wheel for the needle. Fig. 11 is an edge view of the needle-casing with parts in an open position. Fig. 12 is a face view of the same. Fig. 13 is a face view of the needle. Fig. 14 is a face view of the loop-holder for the sewing-thread. Fig. 15 is an enlarged side elevation of the needle with parts in section. Fig. 16 is a side elevation of the tension device for the thread in the needle; and Figs. 17, 18, 19, and 20 are sectional views similar to the left-hand portion of Fig. 7, the views showing the parts in

various positions to illustrate the operation thereof.

The improved machine is mounted on a suitably-constructed frame formed with a base A, posts or columns A', and a top plate A², in which and the said base A is secured a vertically-disposed shaft B, on which is mounted to turn the bag-carrier C, provided at its lower end with a table C', resting on a collar B', attached to the shaft B. The bag-carrier is also provided with a top C², resting on the collar B², secured to the shaft B, and the said top is connected with the table C' by adjustable standards, each formed of two pieces C³ C⁴, fitted to slide one on the other and adapted to be secured together by bolts C⁵ after the desired distance is obtained between the table C' and the top C². It is understood that when an adjustment is made to increase or diminish the distance between the table C' and the top C² the standards are adjusted and the table C' is moved up or down with the collar B' adjusted accordingly on the shaft B. This arrangement is necessary for different-sized bags to be filled with grain, the said bags resting with their lower ends on the table C' and the upper ends or the mouths of the bags being engaged by bag-holders, as hereinafter more fully described.

The bag-carrier C is rotated by mechanism driven from the main driving-shaft D, journaled in suitable bearings on the top plate A² of the main frame, and this shaft D is provided at one end with fast and loose pulleys D', connected by belt with suitable machinery for imparting a rotary motion to the shaft D. On the latter is also secured a beveled gear-wheel D², in mesh with a beveled gear-wheel D³, secured on the shaft D⁴, journaled in suitable bearings attached to the main frame, as plainly indicated in Figs. 1, 7, and 8. The outer end of the shaft D⁴ is provided with a hand-wheel D⁵, under the control of the operator, and on the said shaft is also secured an eccentric E, connected by its eccentric-rod E' with a block E², fitted to slide in a suitable casing A³, attached rigidly to the main frame. In the block E² is formed an opening E³, into which extends one end of a bell-crank lever E⁴, fulcrumed in an opening formed in a second block e, also sliding in the casing A³. The block E² is formed with a recess e' in its

upper side, into which projects a pin e^2 , fixed in the block e . The blocks e and e^2 therefore have independent sliding movement limited by the slot e' and pin e^2 . The bell-crank is provided with a tooth E^5 , adapted to engage the notches C^6 , formed on the peripheral edge of the top C^2 of the bag-carrier C, as shown in Figs. 7 and 17 to 20. The rod E' , being reciprocated by the eccentric E , drives the block E^2 rapidly back and forth in the casing A^3 . The block e , being also slidable in the casing A^3 and carrying the bell-crank E^4 , is moved with the block E^2 . As the block E^2 moves leftward from the position shown in Figs. 7 and 17, it moves independently of the block e until the pin e^2 is engaged with the right-hand end of the recess e' . When this takes place, the bell-crank lever e^4 will have been thrown to engage its joint E^5 with one of the notches C^6 of the top C^2 of the table. Then when the block e begins to run with the block E^2 the bell-crank lever itself will be advanced leftward and the top C^2 will be driven. Fig. 18 shows the position of the parts immediately before the block e begins to move. Fig. 19 shows the two blocks e and E^2 moved leftward after having advanced the top C^2 , and Fig. 20 shows the parts in the position which they assume when the block E^2 has been partly recovered and immediately before the recovery of the block e begins. The casing A^3 is provided with a spring-pressed pawl E^6 , which engages the notches C^6 of the top C^2 to prevent retrograde movement of said top.

The top C^2 of the bag-carrier C is cut out at four places to form openings, in which are arranged four bag-holders F, each formed with a fixed segmental jaw F' , integral with the top C^2 , and the two movable segmental jaws F^2 and F^3 , pivotally connected at their ends to the top C^2 and pivotally connected at their inner or free ends with a radial bar G, fitted to slide in suitable bearings C^7 , formed or attached to the top C^2 . The pivotal connection between the bar G and the movable jaws F^2 and F^3 is by means of a pin in the bar G, the said pin passing through elongated slots in the free ends of the jaws F^2 and F^3 , so that on moving the bar G radially inward or outward the jaws F^2 and F^3 are opened or moved into a closed position, as illustrated in Fig. 1.

Each of the bars G is provided near its outer end with a depending lug G' , carrying a radially-extending rod G^2 , fitted to slide with its inner end in a bearing formed on the under side of the top C^2 . (See Fig. 2.) On this rod G^2 is coiled a spring G^3 , resting with one end against the aforesaid bearing and with its other end abutting on the lug G' . The spring G^3 serves to move the bar G into an outermost position, so as to hold the movable jaws F^2 and F^3 normally in a closed position, as indicated at the left and right in Fig. 1. The lug G' of each bar G is also connected with one end of a chain G^4 , passing around

pulleys G^5 and G^6 , journaled on the top C^2 , the chain extending downwardly from the pulley G^6 to connect with a vertically-disposed arm G^7 , fitted to slide vertically in suitable bearings attached to the standard parts C^3 , previously mentioned, each arm G^7 being provided at its lower end with a foot-piece G^8 , adapted to be engaged by the foot of the operator to press the foot-piece downward to impart a sliding motion to the arm G^7 in the same direction, so as to exert a pull on the chain G^4 to pull the corresponding bar G inwardly, so as to open the movable jaws F^2 and F^3 , as indicated at the front and rear in Fig. 1. When the front holder F has its jaws F^2 and F^3 in an open position, as shown in Fig. 1, then the bag is attached with its mouth to the said jaws by means of fixed pins F^4 , held on the movable jaws F^2 and F^3 , and by pins F^5 , forming part of the fixed jaw F' , but laterally movable thereon, as hereinafter more fully described.

When the bag has been placed in position on the holder, the operator releases the pressure on the foot-piece G^8 to permit the spring G^3 to push the bar G, with its holder, downward to close the jaws. When the carrier C is now rotated or given a quarter-turn, the closed jaws move into the position shown to the left in Fig. 1. A friction-roller G^9 on top of the bar G now moves in engagement with a cam G^{10} , fixed to the under side of the top plate A^2 of the main frame, and when a quarter-turn is now given to the carrier C this friction-roller G^9 in traveling along the fixed cam G^{10} causes the bar G to slide inward, so as to bring the jaws F^2 and F^3 of this holder into an open position at the time the holder moves into a rearmost or filling position, as indicated in Fig. 1. The bag is now filled, and when this has been done another quarter-turn is given to the bag-holder C, so that the friction-roller G^9 passes off the cam G^{10} to permit the spring G^3 to act on the bar G and close the jaws F^2 F^3 , so as to hold the mouth of the bag over the grain contained in the bag during the time the bag is closed by sewing, while the bag passes from the fourth position back to the first position at the front of the machine.

Each of the fixed jaws F' forms an integral part in the form of an upwardly-extending segmental flange of the ring C^8 of the top C^2 of the bag-carrier, as plainly indicated in Figs. 2 and 5. The pins F^5 extend parallel one to the other and pass through openings in the jaw F' , and the set of pins for each jaw are attached at their inner ends to segmental blocks F^6 , fitted to slide on top of the ring C^8 in the rear of the jaw F' . On the top of each block F^6 are formed angular recesses F^7 , each engaged by a pin H' , depending from a segment H, fitted to slide on the top of the ring C^8 and held in place thereon by bolts H^2 , passing through segmental slots H^3 , formed in the segment H. On the under side of each segment H is formed a recess H^4 , (see Figs. 5 and

6,) engaged by the wrist-pin of a crank-arm H⁵, formed or secured on the upper end of the shaft H⁶, arranged vertically and mounted to turn in suitable bearings in the ring C⁸.

5 On the lower end of the shaft H⁶ is secured a handle H⁷, adapted to be taken hold of by the operator to impart a turning motion to the shaft H⁶, so as to cause the crank-arm H⁵ to impart a sliding motion to the segment H, so
10 as to shift the block F⁶ inwardly or outwardly, according to the motion given to the handle H⁷. The block F⁶ by moving outwardly pushes the pins F⁵ a suitable distance beyond the inner face of the fixed jaw F', so as to se-
15 curely engage the web or fabric of the mouth of the bag to securely hold the mouth of the bag in an open position when the jaws F² and F³ move inward, carrying along the inner
20 part of the web or fabric of the mouth of the bag to hold the mouth open during the filling operation. When the block F⁶ moves out-
wardly, the points of the pins F⁵ are partly withdrawn in the fixed jaw F', and when this
25 takes place the bag is in a filled position at the front of the machine, and the withdrawing of the pins disengages the fabric of the
bag, so as to release the closed-up mouth to allow the removal of the bag from the table C'. Each of the pins F⁵ is preferably pro-
30 vided on top with a transverse notch F⁸ to retain the fabric of the bag in place as long as the pins are in an outermost position and during the time the bag is being filled.

The device for sewing up the mouth of the
35 bag while the latter passes from the fourth to the first position is arranged as follows, special reference being had to Figs. 8 to 14.

On the end of the shaft D is secured a wheel I, formed on its inner face with radial grooves
40 I¹ and I², engaging blocks I³ and I⁴, respectively, extending with their outer ends into openings J¹ and J², respectively, formed in the segmental needle J. The blocks I³ and I⁴ are
provided near their inner ends with pins I⁵
45 and I⁶, engaging the cam-groove K' of a disk K, provided with a hub K², rigidly supported on the main frame and through which passes loosely the forward end of the shaft D. In
the disk K is formed an annular race K³ for
50 the segmental needle J to travel in, the latter being carried around by the blocks I³ and I⁴ as the shaft D is rotated, the said blocks being carried around by the wheel I, before
mentioned. In the under side of the disk K
55 is formed a transversely-extending recess K⁴, through which passes the doubled-up edge of the mouth of the bag, the said edge extend-
ing above the closed jaws F' F² F³ as the lat-
ter pass from the third to the fourth position
60 and from the fourth position back to the first position, as will be readily understood by reference to Fig. 1. Now during the time the
needle J passes through the doubled-up edge
of the bag the corresponding block I³ or I⁴ is
65 moved inwardly by the action of the pin I⁵ or I⁶ traveling in the cam-groove K', the latter

being shaped so as to move the correspond-
ing block into an innermost position at the
time the block passes over the recess K⁴.
Thus both blocks are always in engagement
70 with the needle J for pushing the same around in the race K³, except when one of the blocks
I³ I⁴ is drawn inwardly to pass the recess K⁴. The forward end of the needle J is provided
75 with a point J³, and the rear end thereof is made hollow and provided with a hinged
plate J⁴, held in an open position by a spring
J⁵, but adapted to be opened to place the coil
of thread L in position in the hollow part of
the needle, as shown in Fig. 15. 80

The sewing-thread is doubled up and formed
into a coil with the doubled-up middle por-
tion extending lengthwise through the coil
and with the outer loop L' adapted to hook
85 upon the hook K⁷ of the plate K⁸, fulcrumed on the ring K⁶ at the side of the recess K⁴.
The doubled-up ends of the coil of thread L
pass through a tension device N, fitted into
the outer end of the hollow portion of the
90 needle to give the desired tension to the thread passed through the fabric material of the bag.
The tension device is formed with two longi-
tudinally-extending elliptic springs N¹ N²,
having their convex sides inward toward each
other, as shown in Fig. 16. 95

Now when the several parts are in the po-
sition, as shown in Fig. 15, and the needle is
caused to travel in the race K³ then the needle
passes through the bag material and the loop
100 L' of the sewing-thread at the hook K⁷, and as the cord is now drawn tightly the loop slips
off the hook K⁷ and locks the first stitch on the bag. The cord or thread is carried through
the bag material within the needle and over
it, so as to form a succession of overstitches.
105 The coils or spools of threads L are so formed that the thread is unwound from the forward
end and drawn through the center of the coil,
the outer coil being the last to unwind. The
needle occupies one-half of the race K³, in
110 which it is carried, and the feed mechanism
above described is so arranged that ample
time is given to the needle to enter and pass
through and be clear of the bag before the
bag is moved forward by the intermittently-
115 moving bag-carrier.

On the standard-pieces C⁴ of the bag-car-
rier and on a sleeve on the shaft B are jour-
naled in suitable bearings the trunnions O' of
the dumping or throw-off boards O, normally
120 standing vertically above the table C' and adapted to form back-rests for the sides of the
bags. The upper end of each board O is con-
nected by a short chain O² with the corre-
sponding chain G⁴, so that when the treadle
125 or foot-piece G⁸ is pressed by the operator and the corresponding jaws are opened then a pull
is exerted by the chain G⁴ on the chain O² to
tilt the upper end of the dumping-board O in-
ward and the lower end outward to throw the
130 filled and closed bag off the table C', as shown by dotted line at the left of Fig. 2. The chain

O² is somewhat slack to permit the jaws to open before the board commences to throw the bag off.

The operation is as follows: When the several parts are in position, as illustrated in Fig. 1, the jaws F² and F³ at the front of the machine are opened by the operator pressing the corresponding foot-piece G⁸. A bag is now placed on the pins F⁴ and F⁵, after which the operator removes his foot from the foot-piece G⁸ to permit the corresponding spring G³ to close the jaws F² and F³, as previously explained, so that the two sides of the mouth of the bag are pressed against each other or clamped between the fixed jaw F¹ and the movable jaws F² F³. The operator now shifts the belt from the loose to the fast pulley D¹, so that the shaft D is rotated, and a rotary motion is now given to the bag-carrier C by the mechanism above described to move the bag from the first to the second position, so as to bring the friction-roller G⁹ in engagement with the cam G¹⁰. In the second quarter-revolution of the bag-carrier the jaws F² F³ are opened, so as to hold the mouth of the bag open at the time it passes to the third or rearmost position, and while in this position the bag is filled with the grain, it being understood that the belt is shifted from the fast to the loose pulley after each quarter-revolution of the bag-carrier has been made, so as to give sufficient time for filling the bag. During the next quarter-revolution—that is, after the bag has been filled—the movable jaws F² F³ close by the action of the spring G³ at the time the friction-roller G⁹ passes off the cam G¹⁰, so that the mouth of the bag is closed when the bag arrives at the fourth position. The projecting edge of the mouth of the bag above the jaws now passes into the recess A⁴, and during the first quarter-revolution the needle J is caused to travel around in its circular race K³ to sew the edges of the mouth of the bag, as previously explained. When the bag finally arrives at its first position, its mouth is sewed up, and the operator now turns the handle H⁷, so as to withdraw the pins F⁵, and then presses the foot-piece G⁸, so as to open the movable jaws F² and F³. As the movable jaws F² and F³ swing inward their teeth F⁴ move out of the meshes of the jaws of the fabric of the bag, and as the pins F⁵ have been withdrawn they are also out of engagement with the fabric, and consequently the mouth of the bag is wholly free from the jaws, and at this time the dumping-board O turns, as before explained, so as to throw the bag off the table C⁷. Another empty bag is now inserted in the jaws and hung on the pins F⁴ F⁵, after which the operator releases the foot-piece G⁸ to permit the jaws to close, as before explained.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. A grain-bagging machine provided with a bag-carrier having bag-holders and mount-

ed to rotate, a shaft having a rotary motion, an eccentric held on the said shaft, a reciprocating block connected with the eccentric-rod of the said eccentric, and a bell-crank lever engaged by the said block and provided with a tooth adapted to engage a gear-wheel on the said bag-carrier so as to rotate the latter, substantially as shown and described.

2. A grain-bagging machine provided with a bag-holder having a fixed jaw, pins extending through openings in the said jaw, a block fitted to slide and carrying the said pins, a segment having pins engaging angular recesses or grooves on the said block, and means for imparting a sliding motion to the said segment, as set forth.

3. The combination of an eccentric, a rod driven thereby, a block reciprocated by the rod, a bell-crank lever having connection with the block so as to be oscillated thereby, a support whereon said bell-crank lever is mounted, and a gear engaged and driven by the bell-crank lever.

4. The combination of a support, a bell-crank lever mounted thereon, a reciprocal block carried adjacent to the support and engaging the bell-crank lever, a gear driven and engaged by the bell-crank lever, and a spring-pressed dog carried by the support and co-acting with the gear to prevent retrograde movement thereof.

5. In bag-holding jaws, the combination of a ring, a segmental block having a diagonal groove formed therein, the segmental block being movable laterally on the ring, a pin carried by the segmental block, a segment movable longitudinally on the ring and having a portion projected into the groove of the segmental block, and means for imparting movement to the segment.

6. The combination with a frame, of a bag-carrier turning thereon, jaws held by the bag-carrier and capable of engaging the mouth of the bag, a spring actuating one of the jaws, and a cam held by the frame and engaged by a portion of the jaws as the jaw swings whereby to move the spring-pressed jaw against the spring thereof.

7. The combination of a revoluble member having notches formed therein, a stationary casing adjacent to said revoluble member, two blocks sliding in the casing and having a pin-and-recess connection with each other, a bell-crank lever fulcrumed on one block and having connection with the other block, the bell-crank lever engaging in the notches of the said revoluble member, and means for reciprocating the last-named block.

8. The combination with a member to be driven, of a casing held stationary adjacent thereto, two blocks sliding in the casing and having a pin-and-recess connection, a bell-crank lever fulcrumed to one block and engaged to the remaining block, and means connected with said remaining block for reciprocating the same.

9. The combination with a member to be

driven, of a casing adjacent thereto, two blocks slidable within the casing and having limited independent movement, a bell-crank lever fulcrumed in one block and engaged by the other, the bell-crank lever serving to engage said member to be driven, and means for reciprocating the last-named block.

10. The combination with a member to be driven, of a casing, two blocks sliding in the casing and having limited independent movement, and a bell-crank lever mounted on one block and engaged with the other, the bell-crank lever engaging said other member to be driven and being rocked and slid by the action of the two blocks.

11. In a grain-bagging machine, the combination of a frame having a base and columns mounted thereon and supporting a top plate, a revoluble shaft mounted vertically in the frame, a bag-carrier mounted on the shaft to turn therewith, the bag-carrier having a table and a top adjustably connected with each other, means for rotating the bag-carrier, a dumping-board carried by the bag-carrier and mounted to swing on the bag-carrier and serving to eject the bag from the same, means in connection with the dumping-board whereby to operate the dumping-board, and means held by the top of the carrier whereby to hold the bag during the filling thereof.

12. In a grain-bagging machine, the combination with a frame of a revolubly-mounted bag-carrier situate therein, a dumping-board mounted to swing on the bag-carrier and serving to eject the bag, a chain in connection with the dumping-board, an arm mounted to slide vertically on the bag-carrier and connected with the chain, and a foot-piece attached to the lower end of the arm whereby to operate the dumping-board.

13. A grain-bagging machine having a revoluble bag-carrier, provided with a table and with a top held above the table and turning therewith, a dumping-board mounted on the bag-carrier and between the table and top, and jaws mounted on the top above the dumping-board, the jaws serving to hold the bag during the filling thereof.

14. In a grain-bagging machine the combination with a frame, of a revoluble bag-carrier mounted on the frame and having a fixed segmental jaw, two movable segmental jaws pivotally mounted on the bag-carrier and co-acting with the fixed jaw, a bar pivotally connected with the movable jaws and sliding radially on the bag-carrier, and a fixed cam carried by the frame and serving to reciprocate the bar on the bag-carrier to actuate the movable jaws.

15. In a grain-bagging machine, the combination of a frame, a cam carried thereby, a bag-carrier turning in the frame, a fixed jaw formed on the bag-carrier, a movable jaw mounted on the bag-carrier, and a radially-movable bar carried by the bag-carrier and connected with the movable jaw and recip-

roated by the cam of the frame as the bag-carrier turns therein whereby to operate the movable jaw.

16. The combination of a movable and a stationary jaw, the latter comprising a ring, a segmental block mounted thereon and movable radially with reference to the ring, the segmental block having a diagonally-disposed slot therein, a segment fitted to slide circumferentially on the top of the ring and having a pin depending therefrom and extending into the slot of the first-named segmental block and movable with the same, the pin extending through a portion of the ring.

17. The combination of a movable jaw and a stationary jaw, the latter comprising a ring, a segmental block mounted thereon and movable radially with reference to the ring, a pin carried by the segmental block and extending through a portion of the ring and movable with the segmental block, the segmental block also having a diagonally-disposed slot therein, a segment mounted to slide circumferentially on the top of the ring and having a pin fitted in the slot of the first-named segmental block whereby to move the block, and a rock-shaft having a crank engaging the segment by which to move the segment.

18. The combination of a movable jaw and a stationary jaw, the latter comprising a ring, a segmental block movable thereon, a pin carried by the segmental block and moving with the same relatively to the ring, and means having connection with the segmental block and serving to transmit movement thereto.

19. The combination of a movable jaw and a stationary jaw, the latter comprising a ring, a segmental block mounted and movable thereon, a pin carried by the segmental block and moving with the same relatively to the ring, and a segment movable circumferentially with the ring and having connection with the segmental block whereby to move the same.

20. A grain-bagging machine having a frame, and a revoluble bag-carrier mounted thereon, the bag-carrier having a table and a top in connection with each other, the top having a ring, and the top also having a movable jaw and a stationary jaw, the latter comprising a jaw proper formed on the ring, a segmental block movable radially on the top of the ring, pins carried by the segmental block and moved with the same, and a segment mounted on the ring and movable circumferentially thereon, the segment having connection with the segmental block whereby to move the same.

21. A grain-bagging machine having a frame, and a revoluble bag-carrier mounted therein, the bag-carrier having a movable jaw and a stationary jaw, the latter comprising a jaw proper and a ring on which the jaw proper is formed, a segmental block mounted on the ring and movable radially with reference thereto, pins carried by the segmental block, the segmental block having a diago-

nally-disposed slot or groove formed therein, and a segment mounted to slide circumferentially on the ring, the segment being provided with a pin projecting into the slot or
5 groove of the segmental block to move said block radially.

22. A grain-bagging machine having a frame, a revoluble bag-carrier mounted therein and comprising a table, and a top sustained adjustably above the table, a dumping-board mounted on the bag-carrier between the top and the table, means for operating the dumping-board to eject a bag from the table, a stationary jaw formed on
15 the top of the bag-carrier at a point adjacent to the dumping-board, a movable jaw mounted adjacent to the stationary jaw and coacting therewith, a rod carried by the bag-carrier and connected with the movable jaw, a
20 cam carried on the frame and serving to mobilize the movable jaw, through the medium of the rod, the jaw serving to hold the bag in open and closed positions, and means for sew-

ing the bag when held in closed position by the jaws. 25

23. In a grain-bagging machine, the combination of a frame, a revoluble bag-carrier mounted thereon, a dumping-board mounted on the bag-carrier, a stationary jaw located on the bag-carrier above the dumping-board, pins normally projecting inward from the
30 stationary jaw, means for sliding the pins in and out of said jaw, and a second jaw carried by the bag-carrier and movable toward and from the stationary jaw, the second jaw
35 being provided with pins and the two sets of pins serving to engage the bag, the pins of the stationary jaw being movable or retractable to permit the bag to be thrown outward by the dumping-board.

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Witnesses:

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