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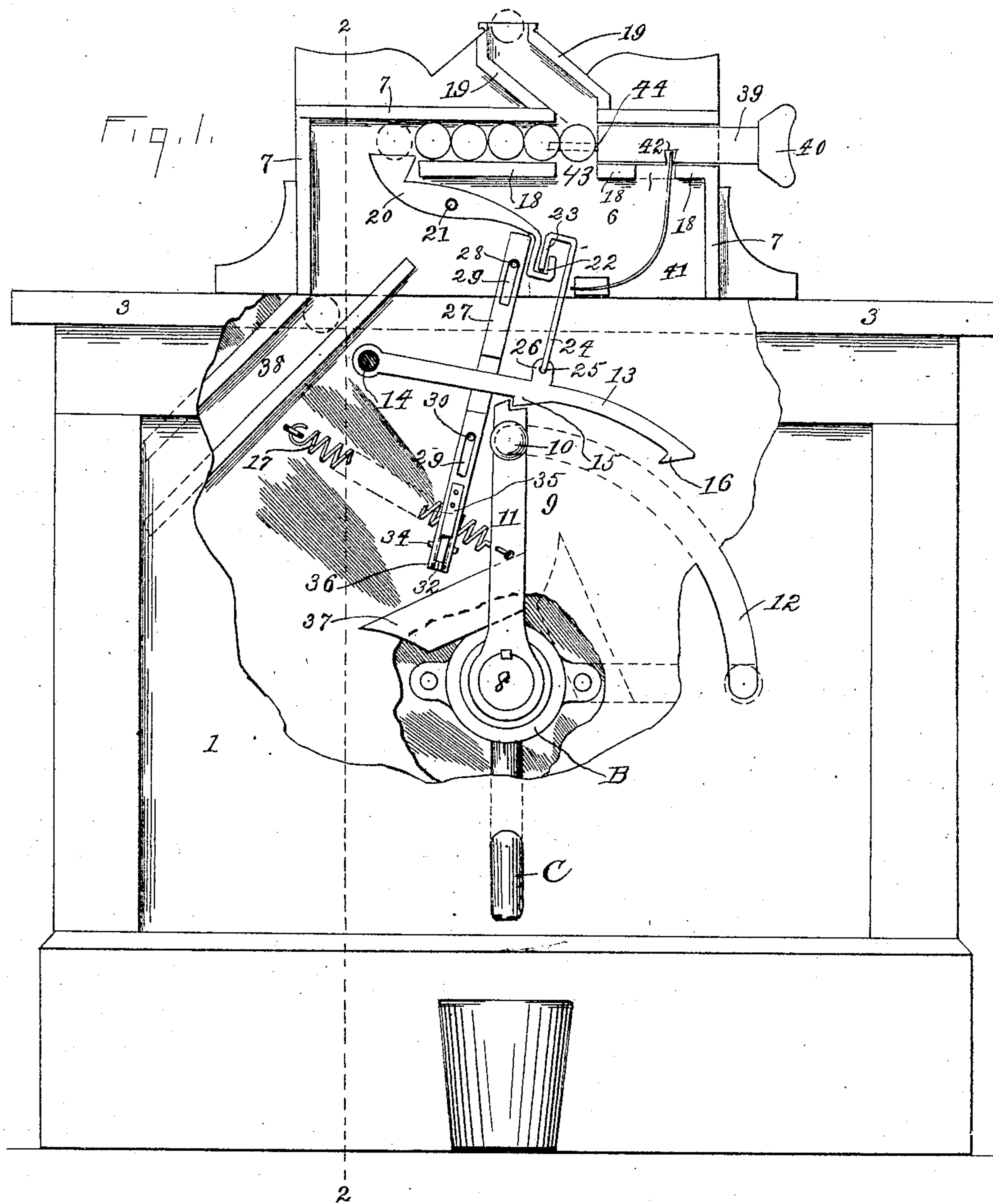
PATENTED DEC. 20, 1904.

A. SATTERFIELD.  
CHECK CONTROLLED APPARATUS.

APPLICATION FILED DEC. 7, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WTTESSES

Carrie R. Ivy.

R. M. Hall

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1

Az Satterfield

By Cyrus Kehr  
Atty.

No. 777,923.

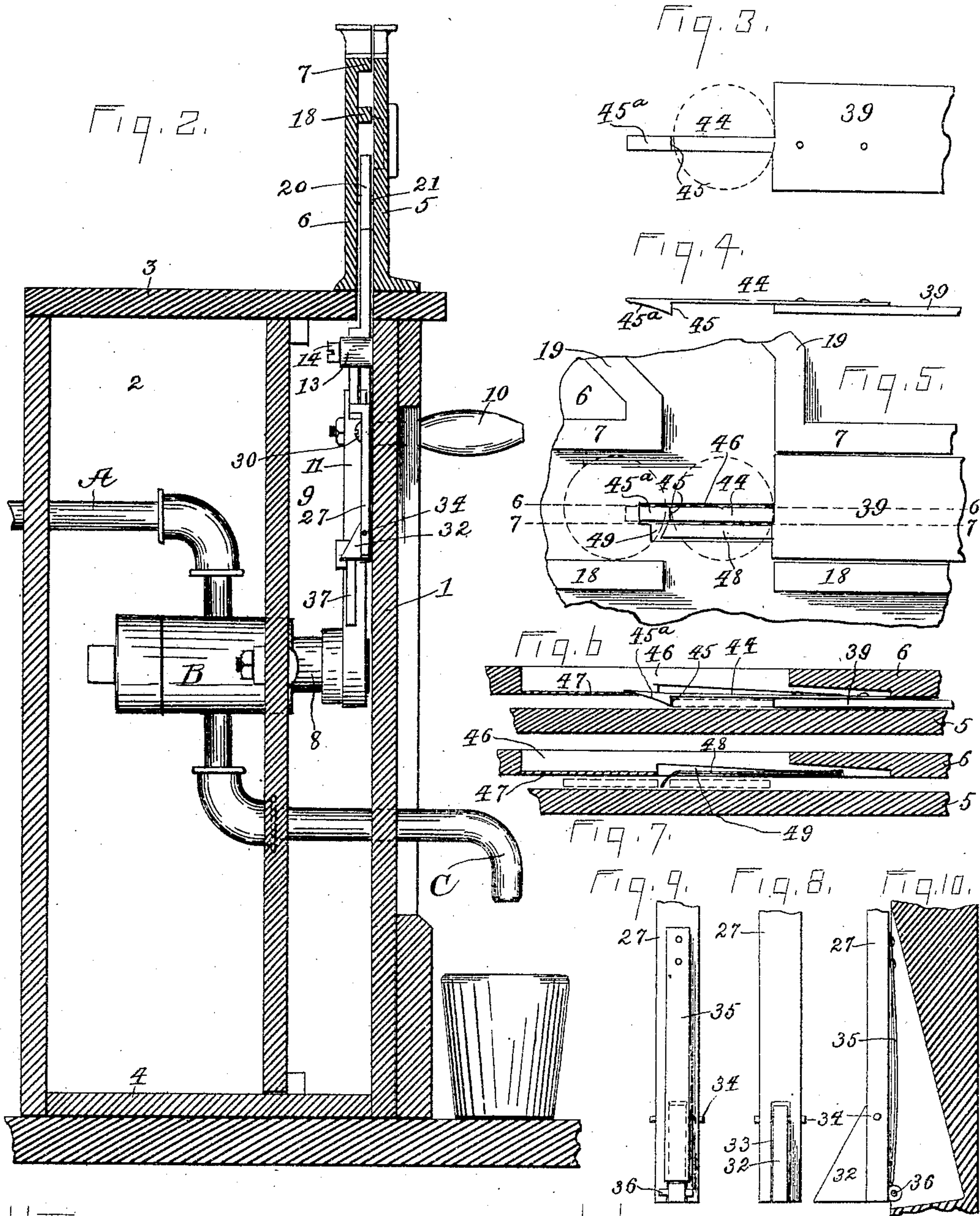
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2 SHEETS—SHEET 2.



WITNESSES  
Carrie R. Ivy.

Rm. 222

INVENTOR  
A. Satterfield  
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Atty.



# UNITED STATES PATENT OFFICE.

AZ SATTERFIELD, OF KNOXVILLE, TENNESSEE.

## CHECK-CONTROLLED APPARATUS.

SPECIFICATION forming part of Letters Patent No. 777,923, dated December 20, 1904.

Application filed December 7, 1903. Serial No. 184,067.

*To all whom it may concern:*

Be it known that I, Az SATTERFIELD, a citizen of the United States, residing at Knoxville, in the county of Knox and State of Tennessee, have invented a new and useful Improvement in Check-Controlled Apparatus, of which the following is a specification, reference being had to the accompanying drawings.

My improvement relates particularly to  
10 check - controlled apparatus comprising a crank which is to be actuated for performing the function designed to be performed in exchange for the check which is deposited into the apparatus.

15 The apparatus is applicable to machines for vending liquids, gases, and other commodities and for controlling musical instruments, &c.

In the accompanying drawings, Figure 1 is a front elevation with a portion of the front wall  
20 of the case removed to expose the interior mechanism. Fig. 2 is a vertical transverse section on the line 2 2 of Fig. 1. Figs. 3, 4, 5, 6, and 7 are detail views of the check-driving mechanism. Figs. 8, 9, and 10 are details of  
25 a portion of the releasing mechanism.

Referring to said drawings, 1 is the front wall of the case which incloses the greater portion of the operating mechanism. 2 2 are the side walls of said case. 3 is the top of the  
30 case, and 4 is the bottom thereof. These portions of the case may be in any suitable form, and they may be of any suitable material.

Upon the front portion of the top and in the plane of the inner face of the front wall 1 is  
35 a metallic upward extension of the case, said extension consisting of a front plate 5 and a rear plate 6. The front face of the rear plate 6 is provided with marginal ribs 7, which bear against the front plate 5 for the forming of a  
40 chamber between the plates 5 and 6 to be used for a portion of the check-passage and for containing a portion of the mechanism whereby the crank is releasably controlled.

At the central portion of the case is located  
45 a horizontal shaft 8 axially perpendicular to the front wall of the case, and 9 is a crank applied to said shaft for imparting rotation or partial rotation to said shaft. Said shaft is suitably joined to any mechanism which is de-  
50 signed to be operated to deliver any goods or

perform any function or service in exchange for one of the particular checks to which the machine is adapted. In the drawings said shaft is shown joined to a measuring-valve B, which receives liquid from a pipe A and dis-  
55 charges said liquid through the pipe C. The handle 10 of said crank extends forward through a slot 12 cut through the front wall 1 concentric with the axis of the shaft 8. The drawings show said slot extending through a  
60 quadrant of a circle. Thus the handle of said crank is outside of the case and may be grasped by a person standing in front of said case; but the arm 11 of the crank is within the case and there controlled by mechanism which is inac-  
65 cessible to a person standing in front of the case. The first member of the mechanism for controlling the crank-arm is a pawl 13, located above the upper portion of the slot 12 and hinged flatwise against the inner face of the  
70 wall 1 by a suitable stud or post 14, extending rearward from the inner face of said wall through said pawl. Being thus hinged the free end of said pawl may approach and recede from said slot. Said pawl has a depending hook 15  
75 almost directly above the upper end of the slot 12, and the drawings show said pawl also provided with a second hook 16, approximately midway between the two ends of the slot 12. The crank-arm 11 is sufficiently long  
80 to cause the path of the outer end of said arm to cross said hooks 15 and 16, to the end that when the crank-arm is in the upright position the hook 15 will stand in front of the upper end of said arm and lock the latter in said po-  
85 sition and to the end that if the crank-arm is between said hooks it cannot pass downward beyond the hook 16, because said arm will when it moves downward meet the hook 16 and be arrested thereby. The lower face of  
90 each of said hooks is oblique to the path of the end of the crank-arm in order that the pawl may be pressed upward by the free end of the crank-arm when the latter is moved upward. If so desired, the apparatus may be  
95 so arranged as that the operation desired by the person depositing the check will be performed by the movement of the crank-handle from the upper portion of the slot 12 to the lower portion, or the apparatus may be so  
100



constructed as to require the downward movement of the crank and also the reverse movement of the crank to complete the operation desired by the person depositing the check. If the operation is performed by only the direct movement of the crank, a contracting-spring 17 may be applied by one end to said crank and by the other end to some relatively stationary part of the apparatus for effecting the reverse movement of the crank when the latter has been released by the operator. My apparatus embodies mechanism combined with said pawl and extending into such relation with the check-passage as to be operated by a check going through said passage in such manner as to raise said pawl sufficiently to bring the hooks 15 and 16 out of the path of the upper end of the crank-arm. Said mechanism will be next described.

At a distance below the upper rib 7 equal to the diameter of the check to be used the rear plate 6 has a similar rib 18 extending from one end of the plate 6 beyond the middle of the latter. A section equal in length to the diameter of the check to be used is cut out of the upper portion of the rib 7, and from each side of the opening thus made a rib 19 extends upward to the upper edge of the plate 6. Said ribs are preferably inclined, so as to form an indirect check-chute leading into the horizontal passage between the ribs 7 and 18. A lever 20 is located beneath said passage and pivoted upon a stud 21, projecting horizontally from the front face of the plate 6. The upper end of said lever is expanded in the plane of the check-passage and rises a short distance above the lower portion of said passage, so that the space between said end and the upper wall of said passage (the rib 7) is less than the diameter of the checks, whereby the passage of a check beyond the open end of the check-passage can be effected only by forcing said end of said lever downward. The lower or opposite end of said lever is formed with a notch 22, in which rests the hook 23 of the link 24. The lower end of said link is suitably hinged to the pawl 13, as by a short arm 25, extending laterally into a lug 26 on the pawl 13. It will be readily understood that the passage of a check through the open end of the check-passage over the upper end of said lever 20 will tilt the latter and lift said link 24, and thereby cause the latter to lift said pawl, and that if the dimensions of the several parts are properly proportioned the hooks 15 and 16 will rise above the path of the free end of the crank-arm, so that the crank is free to be turned downward, and, as already described, the lower faces of the hooks 15 and 16 are oblique, so that said hooks are adapted to be at any time pressed upward by the reverse movement of the crank; but the pawl 13 cannot descend so long as the check is held between the upper end of the lever 20 and the adjacent portion of the rib 7, and it is necessary to permit the pawl to descend as

soon as the free end of the crank is passed downward beyond said pawl. For this purpose I employ mechanism for tilting the lever 20 away from the check and holding it so until the crank-arm has passed downward beyond both hooks of the pawl 13, said mechanism for effecting such tilting being actuated by said crank or some part connected with said crank. For this purpose I use a reciprocatory bar 27, supported on the inner face of the wall 1 and between the plates 5 and 6 by a stationary horizontal stud 28, extending from the rear plate 6 through a longitudinal slot 29 in the upper portion of said bar, and a stud 30, extending from the wall 1 through another longitudinal slot 29 in the lower portion of said bar. The upper end of said bar is held against forward and backward movement by means of the plates 5 and 6, and the lower end of said bar is held in position on the stud 30 by means of a head on said stud. The upper end of said bar 27 extends against or nearly against the lower edge of the lever 20 at the side of the pivot of the latter at which the notch 22 is located when said lever is in its normal position in order that the lifting of said bar may tilt said lever, so as to lower the end of the latter which extends into the check-passage. Since the bar 27 and the lever 20 merely abut against each other, but are not joined, the lever 20 may be tilted by the forward movement of the check without lifting said bar, and since the hook 23 of the link 24 rests loosely in the notch 22 said link and the pawl 13 may move upward independently of the lever 20 and the bar 27. Such movement takes place during the reverse movement of the crank, the upper end of the crank-arm pressing against the oblique faces of the hooks 15 and 16 and raising said pawl and said link. At its lower end said bar has a rearward-directed spur 32, having a lower horizontal face and an upper oblique face. Said spur rests in a slot 33, and a pin 34 extends through said bar and the upper end of said spur, whereby said spur is hinged to permit forward movement of the lower portion of said spur until the oblique face of said spur is approximately in the plane of the rear face of said bar. A blade-spring 35 is applied to the front face of said bar and bears against the lower portion of the front face of the spur and normally holds the latter in its rearmost position. A pin 36 extends transversely through the heel of the spur in front of the bar 27 and serves to limit the rearward movement of said spur. To the crank-arm 11 is attached a cam-arm 37, which stands below said spur when the crank is in the upright or normal position. When the crank moves forward, said cam-arm engages said spur from below and lifts the latter and the bar 27 sufficiently to cause said bar to engage and tilt the lever 20, so as to lower the upper end thereof a little farther than it stood on account of its engagement



with the check. The check is thus freed and rolls forward and descends by its weight between the plates 5 and 6 into the passage 38, and thence into any suitable receptacle. If so desired, the engagement between the cam-arm 37 and the spur 32 may take place after the crank has passed the hook 16, so that the freeing of the check will not cause said hook to arrest the movement of the crank; but the parts may be so timed as to cause the cam-arm to engage said spur directly after the crank-arm has passed the hook 15 if the engagement between said cam-arm and said spur is then maintained until the crank-arm has passed the hook 16. Said cam-arm must pass out of engagement with said spur soon after said hook 16 has been passed by the crank-arm in order that the pawl 13 may promptly descend and be in position to prevent a second forward movement of the crank after reversal to the normal position if only the hook 15 is used and to prevent a second forward movement after the crank-arm has passed the hook 15 if both hooks are used. The purpose of the hook 15 is to hold the crank-arm in its normal or locked position, and the purpose of the hook 16 is to prevent the operator from moving the crank forward to its limit and then partially reversing it and again moving it forward to its limit, and thereby repeating or prolonging the action of the vending apparatus. When the crank is reversed to its normal position, after it has been turned forward far enough to cause the cam-arm to pass said spur, said cam-arm engages the oblique face of said spur and presses said spur forward until said cam-arm has freed itself from said spur. Then said spring 35 again presses said spur into its normal position.

Between the plates 5 and 6 and in line with the horizontal portion of the check-passage is the horizontal plunger 39, having on its outer end a head 40, normally resting away from the plates 5 and 6 a distance equal to the diameter of the check to be used in the apparatus, to the end that said plunger may be pressed forward into said check-passage a distance equal to the diameter of one of the checks. A suitable spring 41 is secured to the plate 6 by one end and has its free end engaged in a notch 42 in the plunger, said spring being under strain, so as to hold said plunger normally at its outer limit of movement. Said spring may extend through a gap 43 in the rib 18, said gap affording a space for movement for said spring and the portion of the rib at the outer side of said gap constituting a stop for said spring when the plunger is in its outer or normal position. Said gap may also serve as a passage for diverting checks which are too small to be engaged and held by said plunger. To the rear face of the plunger is secured a laterally-flexible pointed hook 44, extending horizontally away from said plunger along the front face of the plate

6 and having the perpendicular face 45 and the oblique front face 45<sup>a</sup>. The space between the inner end of the plunger and the perpendicular face 45 of the hook is a little less than the diameter of the check in order that a check of the proper size descending through the chute will be caught and held by said hook, while a check of less diameter will pass downward between said face and the end of the plunger and through the gap 43. Behind said hook said rear plate 6 has a slot or cavity 46 opening through the front face of said plate from the inner portion of the plunger nearly to the free end of said hook, and from the latter point the front of said cavity is covered by a thin wall 47 for a distance equal to the range of movement of the plunger. Normally the extreme point of the hook rests behind the wall 47, so that when the plunger is pressed forward the hook will be deflected rearward until it rests entirely rearward of the front face of the plate 6 and entirely out of the path of the check. When the plunger is again returned to its normal position, the hook is again freed from the wall 47 sufficiently to bend forward into the path of the check.

Directly below the hook 44 is a horizontal laterally-yielding stop 48, the outer end of which is secured to the rear plate 6 in a cavity 49 and the inner end of which stop projects obliquely into the path of the checks beneath the head of the hook 44 between the space occupied by the check when first received by said hook and the space occupied by said check when the latter has been driven forward by the forward movement of the plunger, to the end that said stop may stand behind the check when the plunger has completed its forward movement and serve to then hold the check against reverse movement while the plunger moves backward. The cavity 49 is long enough and deep enough to receive the stop 48 when the latter is pressed sidewise by the passing check.

It will be understood that, as shown in the drawings, the releasing apparatus does not become operative until several checks have been placed into the horizontal portion of the check-passage. It is obvious, however, that said horizontal passage may be shortened so as to require the presence of a smaller number of checks to render the apparatus operative.

I claim as my invention—

1. In a machine of the character described, walls forming a check-passage, a plunger in line with said passage, means upon said plunger for receiving and holding a check of chosen diameter only, and means for deflecting said holding means out of the check-passage when the plunger is moved forward, substantially as described.

2. In a machine of the character described, walls forming a check-passage, a plunger in line with said passage, means upon said plunger for receiving and holding a check of



chosen diameter only, means for deflecting said holding means out of the check-passage when the plunger is moved forward, and controlling mechanism comprising a member extending into said passage, substantially as described.

3. In a machine of the character described, walls forming a check-passage, a plunger in line with said passage, means upon said plunger for receiving and holding a check of chosen diameter only and releasing said check when the plunger has been moved forward, and a yielding stop in the check-passage for preventing reverse movement of the check after it has been released by said holding mechanism, substantially as described.

4. In a machine of the character described, walls forming a check-passage, a plunger in line with said passage, means upon said plunger for receiving and holding a check of chosen diameter only and releasing said check when the plunger has been moved forward, and a yielding stop in the check-passage for preventing reverse movement of the check after it has been released by said holding mechanism, and controlling mechanism comprising a member extending into said passage, substantially as described.

5. In a machine of the character described, walls forming a check-passage, one of the walls at the side of said check-passage having a slot, 46, a plunger in line with said passage, a yielding hook upon said plunger and resting partially in said slot, and crank-controlling mechanism comprising a member extending into said passage, substantially as described.

6. In a machine of the character described, walls forming a check-chute and a check-passage at the base of said chute, a plunger in line with said passage, means upon said plunger for receiving and holding a check of chosen diameter only, and means for deflecting said holding mechanism out of the check-passage when the plunger is moved forward, substantially as described.

7. In a machine of the character described, walls forming a check-chute and a check-passage at the base of said chute, a plunger in line with said passage, means upon said plunger for receiving and holding a check of chosen diameter only, means for deflecting said holding means out of the check-passage, and controlling mechanism comprising a member extending into said passage, substantially as described.

8. In a machine of the character described, walls forming a check-chute and a check-passage at the base of said chute, a plunger in line with said passage, means upon said plunger for receiving and holding a check of chosen diameter only and releasing said check when the plunger has been moved forward, a yielding stop in the check-passage for preventing

reverse movement of the check after it has been released by said holding mechanism, substantially as described.

9. In a machine of the character described, walls forming a check-chute and a check-passage at the base of said chute, one of the walls at the side of said check-passage having a slot, 46, a plunger in line with said passage, a yielding hook upon said plunger and resting partially in said slot, means for actuating said hook, and crank-controlling mechanism comprising a member extending into said passage, substantially as described.

10. In a machine of the character described, walls forming a check-chute and a check-passage at the base of said chute, one of the walls adjacent to said check-passage having a slot, 46, a plunger in line with said passage, a yielding hook upon said plunger and resting partially in said slot, means for actuating said hook, a yielding stop adjacent to said hook, and crank-controlling mechanism comprising a member extending into said passage, substantially as described.

11. In a machine of the character described, walls forming a check-passage, a plunger in line with said passage, mechanism upon said plunger for receiving and holding a check of a chosen diameter only and releasing said check from the plunger when the check has been advanced into said passage by the movement of the plunger, a pivoted lever extending into said passage, and means for releasing a check engaged by said lever, substantially as described.

12. In a machine of the character described, walls forming a check-passage, a plunger in line with said passage, mechanism upon said plunger for receiving and holding a check of a chosen diameter only and releasing said check from the plunger when the check has been advanced in said passage by the movement of the plunger, mechanism for deflecting said holding mechanism out of the check-passage, and a pivoted lever extending into the check-passage, substantially as described.

13. In a machine of the character described, walls forming a check-passage, a plunger in line with said passage, mechanism upon said plunger for receiving and holding a check of a chosen diameter only and releasing such check from the plunger when the check has been advanced in said passage by the movement of the plunger, a yielding stop in the check-passage adjacent to said plunger for preventing reverse movement of the check when released from the plunger, and a pivoted lever extending into the check-passage, substantially as described.

14. In a machine of the character described, walls forming a check-passage, one of the walls at the side of said passage having a slot, 46, a plunger in line with said passage, a yielding hook upon said plunger and resting par-



tially in said slot, means for actuating said hook, and a pivoted lever extending into said passage, substantially as described.

15. In a machine of the character described, 5 walls forming a check-passage, a plunger in line with said passage, a spring for bringing said plunger into the normal position, mechanism upon said plunger for receiving and holding a check of a chosen diameter only, 10 and mechanism for deflecting said holding mechanism out of the check-passage when the plunger has moved the check forward, substantially as described.

16. In a machine of the character described, 15 walls forming a check-passage, a plunger in line with said passage, a spring for bringing said plunger into the normal position, mechanism upon said plunger for receiving and holding a check of chosen diameter only, 20 mechanism for deflecting said holding mechanism out of the check-passage, and controlling mechanism comprising a member extending into said passage, substantially as described.

25 17. In a machine of the character described, a case comprising an upright wall and a top, said top having an opening above the inner face of said wall, plates, 5 and 6, located upon said top at opposite sides of said opening, one 30 of said plates being provided with ribs for the forming of spaces, including a check-passage, between said plates, a plunger in line with said passage, mechanism upon said plunger for receiving and holding a check of a 35 chosen diameter only and releasing such check from the plunger when the check has been advanced in said passage by the movement of the plunger, substantially as described.

18. In a machine of the character described, 40 a crank, walls forming a check-passage, crank-controlling mechanism normally extending into the path of said crank and into said passage, and means for forcing a check through said passage into engagement between said 45 crank-controlling mechanism and a relatively stationary wall of said passage, whereby said crank-controlling mechanism is moved out of the path of said crank, and means in operative relation with said crank for releasing said 50 check, substantially as described.

19. In a machine of the character described, a crank, walls forming a check-passage, crank-controlling mechanism normally extending into the path of said crank and into said passage, means for forcing a check through said 55 passage into engagement between said crank-controlling mechanism and a relatively stationary wall of said passage whereby said crank-controlling mechanism is moved out of the path of said crank, and a cam-arm in operative relation with said crank for moving said crank-controlling mechanism for the release of said check, substantially as described.

20. In a machine of the character described, 65 a crank, a pawl normally extending into the

path of said crank, walls forming a check-passage, a member in operative relation with said pawl and extending normally into said passage, and means for forcing a check through said passage into engagement between said 70 member and a relatively stationary wall of said passage, and means in operative relation with said crank for releasing said member from said check, substantially as described.

21. In a machine of the character described, 75 walls forming a check-passage, a plunger in operative relation with said check-passage, a pivoted lever, 20, having one end normally extending into said check-passage, a crank, a pawl normally extending into the path of said 80 crank and suitably joined to said pivoted lever, and mechanism in operative relation with said crank for releasing said lever, 20, from the check, substantially as described.

22. In a machine of the character described, 85 walls forming a check-passage, a plunger in operative relation with said check-passage, a pivoted lever, 20, having one end normally extending into said check-passage, a crank, a pawl having a plurality of hooks normally 90 extending into the path of said crank and suitably joined to said pivoted lever, and mechanism in operative relation with said crank for releasing said lever, 20, from the 95 check, substantially as described.

23. In a machine of the character described, a crank, a pawl normally extending into the path of said crank, walls forming a check-passage, a member in operative relation with said pawl and extending normally into said 100 passage, means for forcing a check through said passage into engagement between said member and a relatively stationary wall of said passage, and means in operative relation 105 with said crank for moving said member for the release of said check, substantially as described.

24. In a machine of the character described, a crank, a pawl normally extending into the path of said crank, walls forming a check- 110 passage, a member in operative relation with said pawl and extending normally into said passage, means for forcing a check through said passage into engagement between said member and a relatively stationary wall of 115 said passage, and means for moving said member for the release of said check and holding said member for keeping said pawl out of the path of said crank, substantially as described.

25. In a machine of the character described, 120 a crank, a pawl normally extending into the path of said crank, walls forming a check-passage, a member in operative relation with said pawl and extending normally into said passage, means for forcing a check through 125 said passage into engagement between said member and a relatively stationary wall of said passage, and means in operative relation with said crank for moving said member for the release of said check and holding said 130



member for keeping said pawl out of the path of said crank, substantially as described.

26. In a machine of the character described, a crank, a pawl normally extending into the path of said crank, walls forming a check-passage, a member in operative relation with said pawl and extending normally into said passage, a shiftable member intervening between said first-mentioned member and said crank, and means upon said crank for engaging said shiftable member, and means for forcing a check through said passage into engagement between said first-mentioned member and a relatively stationary wall of said passage, substantially as described.

27. In a machine of the character described, a crank, a pawl normally extending into the path of said crank, walls forming a check-passage, a lever, 20, extending into said passage, a link, 24, intervening between said

lever and said pawl, and mechanism in operative relation with said crank for releasing said lever, 20, from said check, substantially as described.

28. In a machine of the character described, a crank, a pawl normally extending into the path of said crank, walls forming a check-passage, a lever, 20, extending into said passage, a link, 24, intervening between said lever and said pawl, a reciprocatory bar, 27, located adjacent to said lever, 20, and a cam movable with said crank for operating said reciprocatory bar, substantially as described.

In testimony whereof I have signed my name, in presence of two witnesses, this 4th day of December, 1903.

AZ SATTERFIELD.

Witnesses:

CYRUS KEHR,

JOHN M. KIRBY.