Cash Recorders.

No. 840,471. PATENTED JAN. 8, 1907.

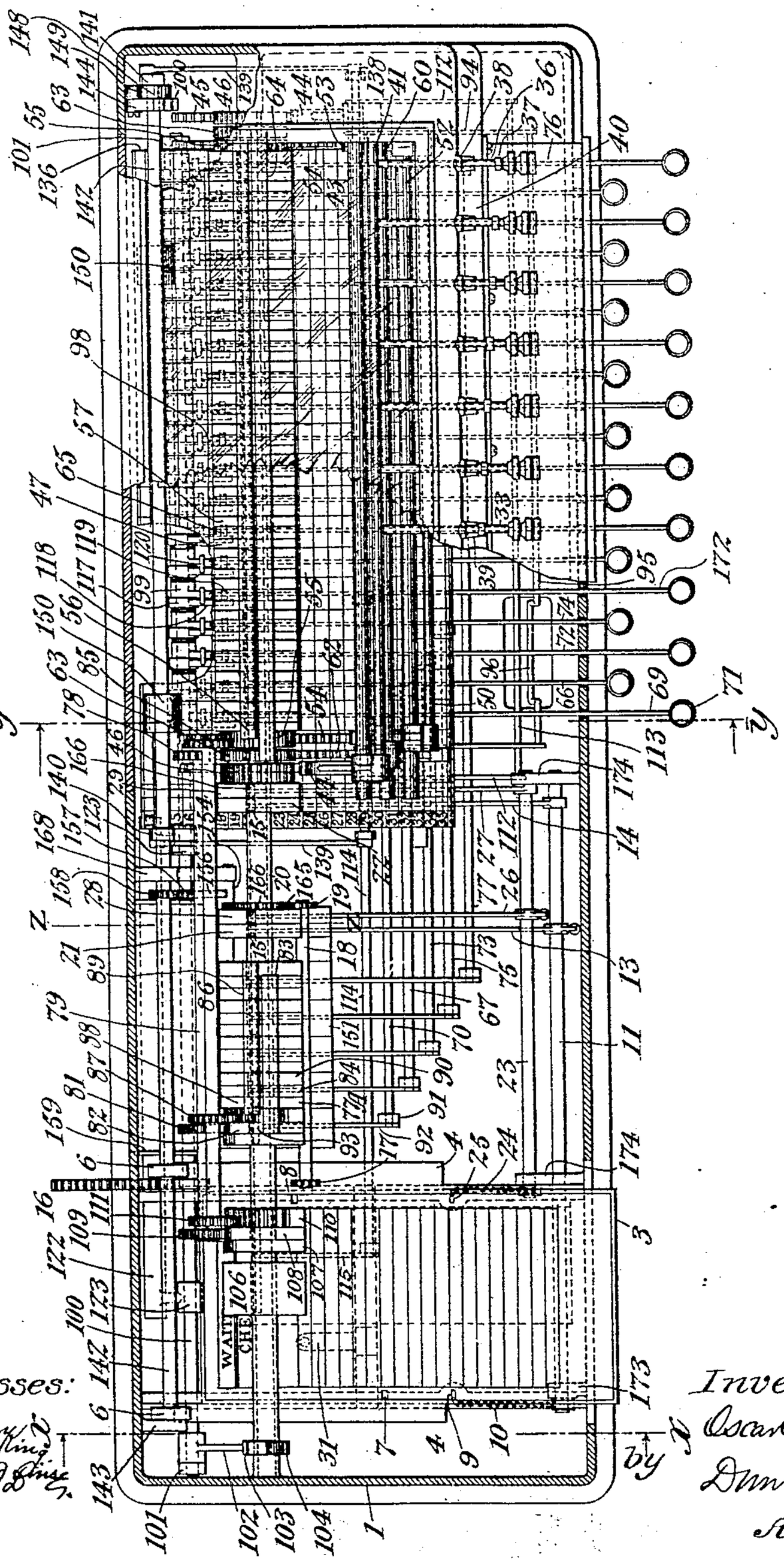
O. E. BRIGHAM.

CHECK PRINTING MACHINE.

APPLICATION FILED AUG. 15, 1904.

5 SHEETS—SHEET 1.

Fig. 1



Witnesses:

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Adolph P. Zinsser

Inventor:

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Dunn & Fink

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5 SHEETS—SHEET 2.

Fig. 1

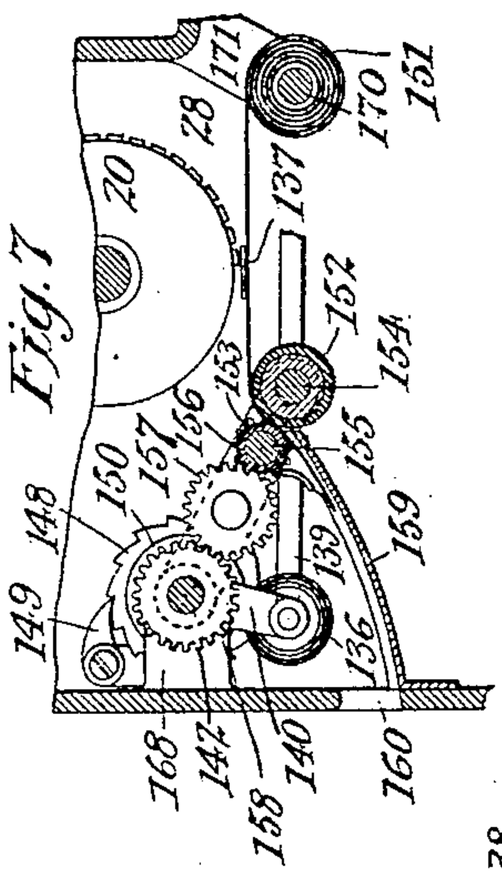
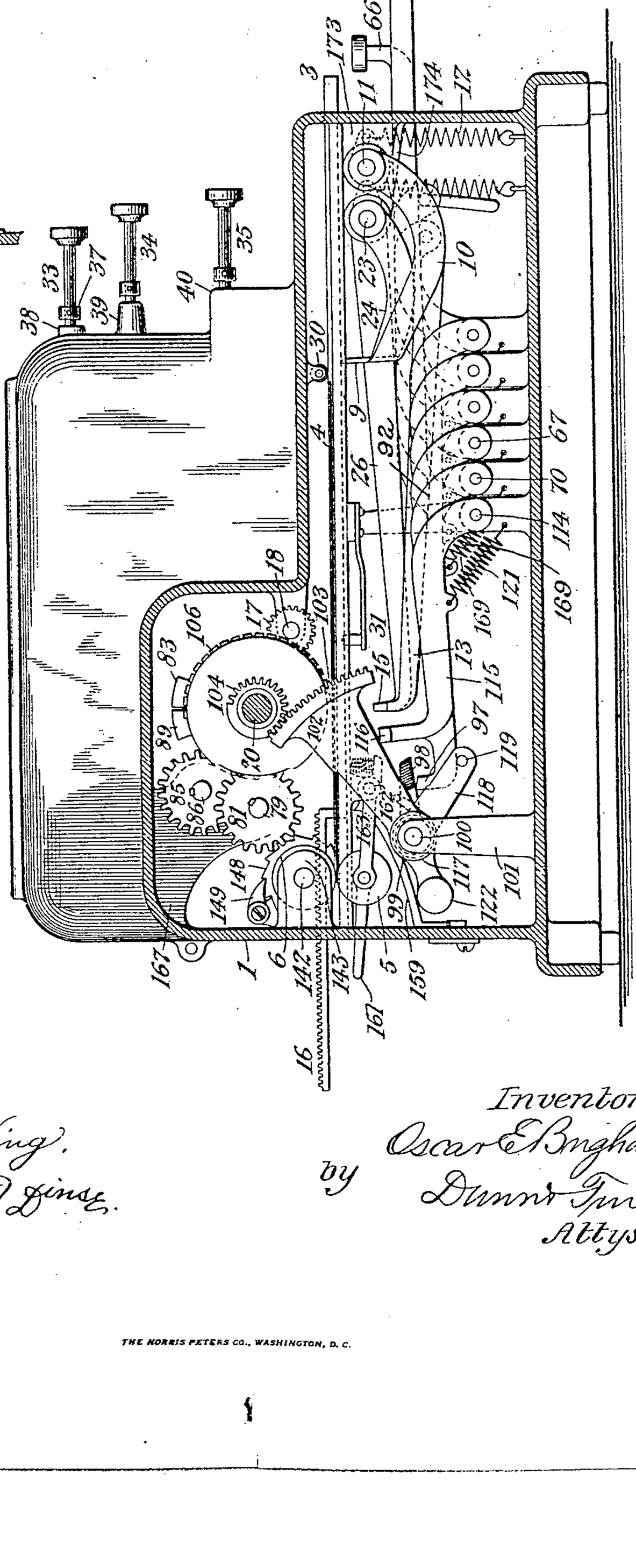


Fig. 2



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6 SHEETS—SHEET 3.

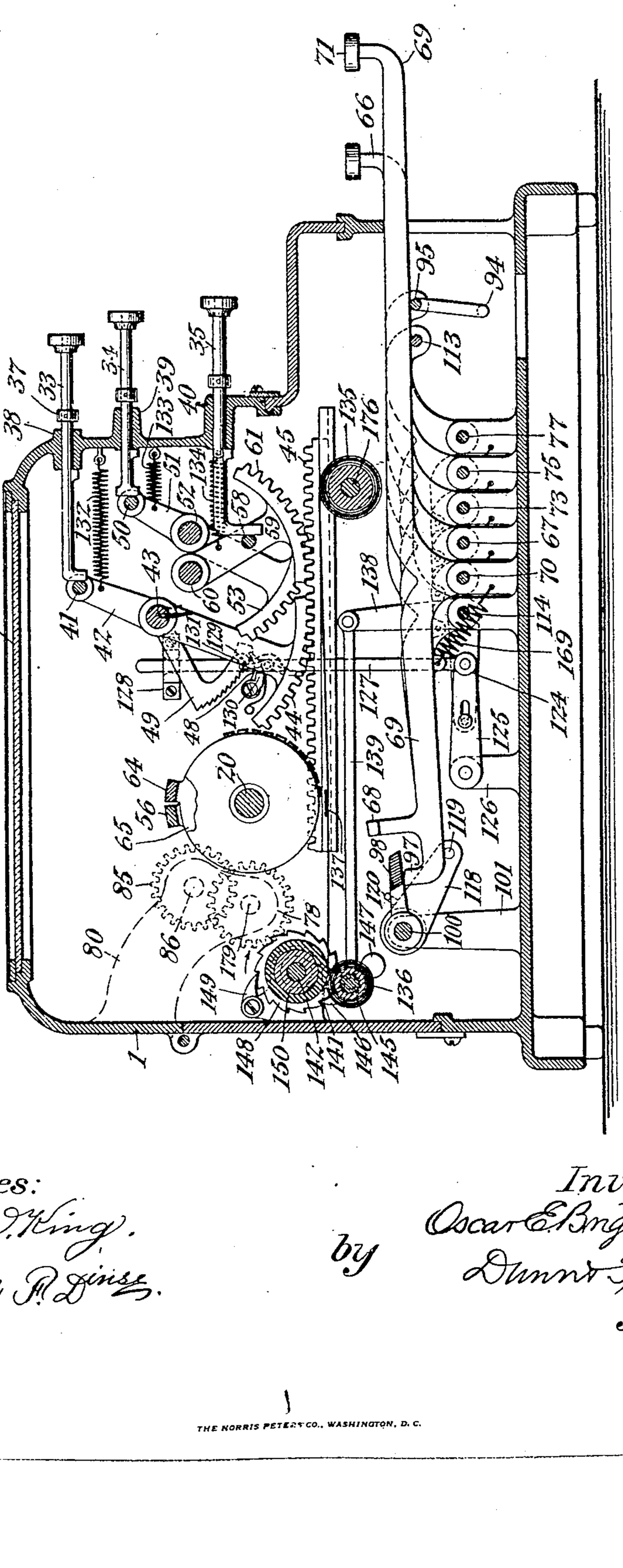

Fig. 3

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5 SHEETS—SHEET 4.

Fig. 4

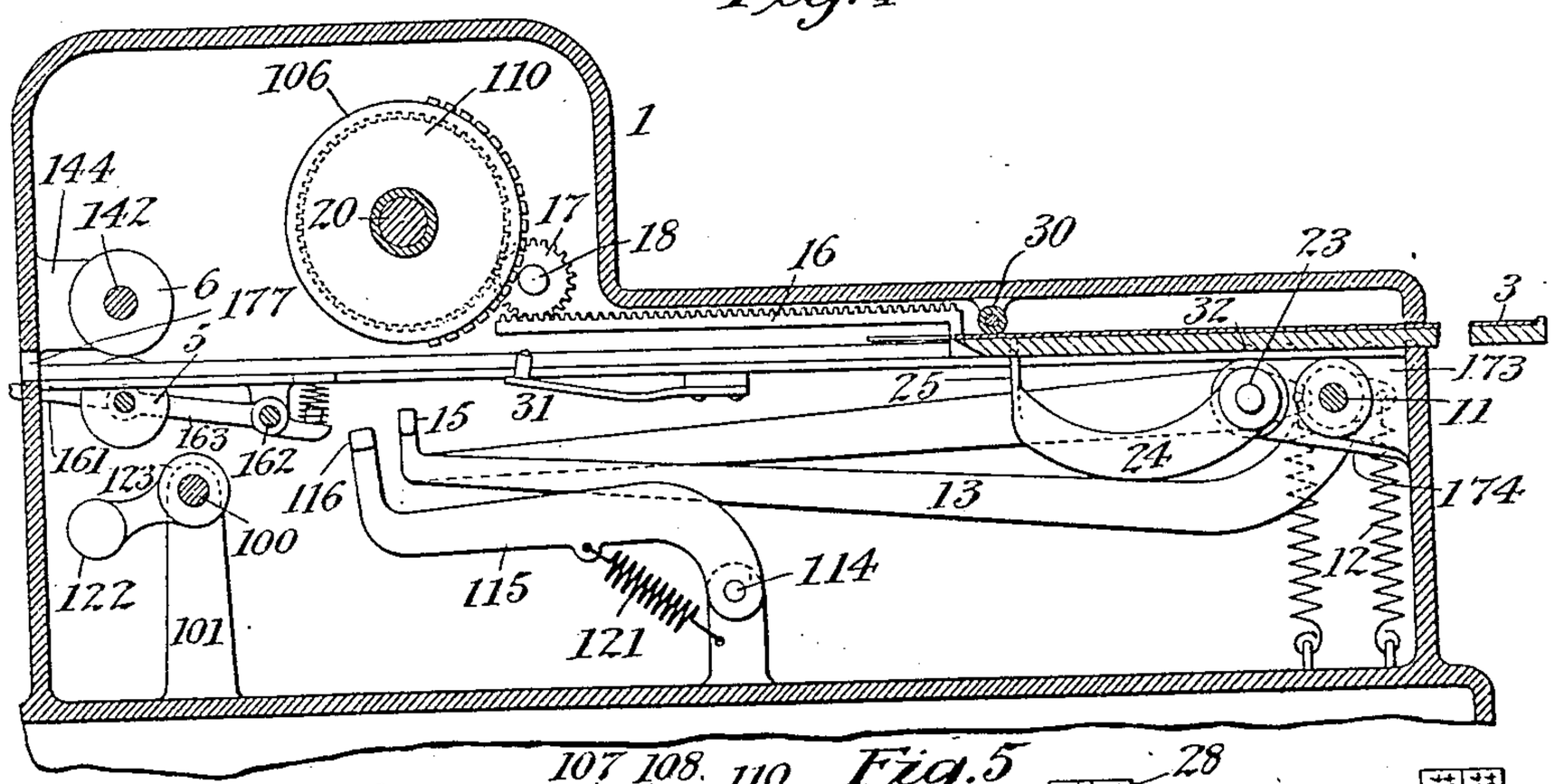


Fig. 5

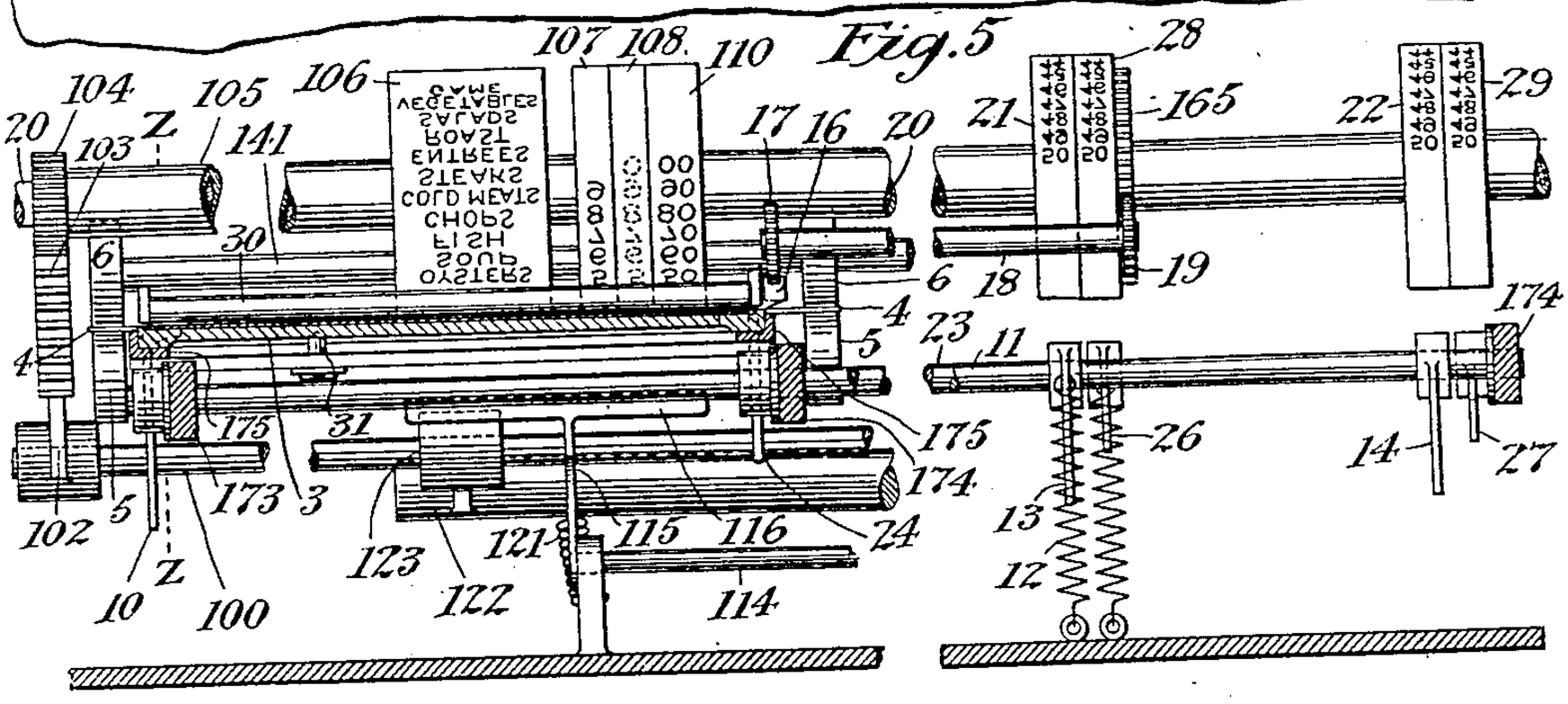
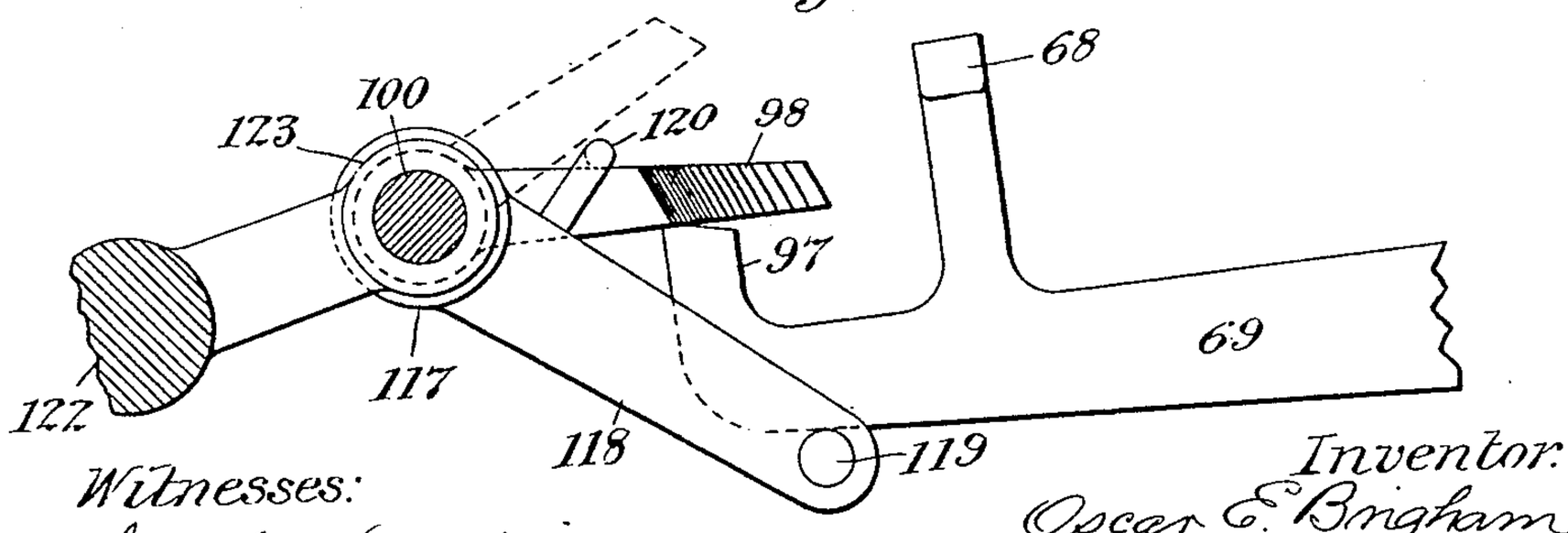


Fig. 6



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Cash Recorders.

No. 840,471. PATENTED JAN. 8, 1907.

O. E. BRIGHAM.

CHECK PRINTING MACHINE.

APPLICATION FILED AUG. 15, 1904.

5 SHEETS—SHEET 6.

Fig. 8

SERIAL No.	WAITER'S No	CHECK No.		FOOD.	WINE.	CIGARS.	DRINKS.	OYSTERS.	SOUP.	FISH.	CHOPS.	COLD MEATS.	STEAKS.	ENTREES.	ROAST.	SALADS.	VEGETABLES	GAME.	POULTRY.	DESSERT.	SUNDRIES.	RETURNED
1	2	6						2.00														
2	5	5					.20															
3	4	7						.50														
4	5	4														.20						
5	2	6					.50															
6	6	3			11.50																	
7	4	9		.70																		
8	7	3		.50																		
9	6	3							.30													
10	2	6				.50																
11	4	9						.50														
12	3	10				.20																
13	4	9		1.00																		
14	5	4													.50							
15	2	9					1.00															
16	2	6												.70								

Fig. 9

WAITER No. 2.	
CHECK No. 6.	
OYSTERS. *Half Shell.*	2.00
SOUP. *Bisque Clams.*	.20
FISH. *Blue Fish.*	.50
STEAK. *Sirloin.*	1.00
ENTREES. *Lamb Ki Pie.*	.70
VEGETABLES. *Mashed Potatoes.*	.60
VEGETABLES. *Asparagus.*	.40
DRINKS. *Brandy*	.50
WINE *N. White Seal.*	2.00
CIGARS. *2 Cigars.*	.50
DESSERT. *Ice Cream.*	.30
	8.70
RETURNED	1.00
	7.70

8

7

Fig. 10

FOOD	WINE	CIGARS	DRINKS	RETED	1	WAITER No	CHECK No.
200						2	6

Witnesses:
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Adolph F. Dinse.

Inventor:
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Attys.

UNITED STATES PATENT OFFICE.

OSCAR E. BRIGHAM, OF NEW YORK, N. Y.

CHECK-PRINTING MACHINE.

No. 840,471. Specification of Letters Patent. Patented Jan. 8, 1907.

Application filed August 15, 1904. Serial No. 220,809.

To all whom it may concern:

Be it known that I, OSCAR E. BRIGHAM, a citizen of the United States, residing at New York, in the borough of Manhattan, county and State of New York, have invented a new and useful Improvement in Check-Printing Machines, of which the following is a specification.

My invention relates to a new and improved machine for recording and checking accounts, and is designed particularly for use in large restaurants and hotels, although it is well adapted for use in dry-goods and department-stores where numbers of salesmen are employed and where it is desired to keep track of the amount of each kind of article sold and by whom in such form as to be readily accessible.

In use in restaurants my machine is adapted to record the articles of food, wine, cigars, &c., supplied and to which waiters they are supplied and to record such information not only on a permanent record in such form as to be readily accessible for taking account of stock, but also to record the same information upon a check which the waiter may present as an order for food, wine, cigars, &c., and which will serve as a voucher for the person supplying such articles and simultaneously to record the same information upon the waiter's check which serves as the guest's bill.

It has been found in large restaurants and hotels that large amounts of food, particularly of the higher-priced sorts, which are supplied to waiters have been purloined, many of the orders being fictitious, and great difficulty is experienced in tracing the food so purloined to the guilty waiter, and it has frequently happened that food has disappeared from the kitchen and it was impossible to tell whether it had been supplied to a waiter or purloined. Many plans have been devised to prevent this, none of which, so far as I am aware, have been satisfactory.

The object of my invention, therefore, is to provide a machine which shall be simple in operation and which will print upon a permanent record in the machine the number of the waiter for whom the article is desired, the number of the order for that particular waiter, and the price (which indicates the quantity) of the particular article ordered in a column appropriated exclusively to that article and at the same time will print upon a duplicate check the same information and upon the check or guest's bill presented by the waiter a description of the food ordered and of the price as the same appear upon the permanent record or checker's sheet in the machine and will thereby constitute a check upon the waiter, as well as upon the kitchen, and will enable the amount of any particular food remaining in the kitchen to be known at any time by simply inspecting the printed checker's sheet and subtracting the quantity sold from the quantity purchased. To effect this object, I have provided my machine with a suitable roll having wound upon it the permanent record or checker's sheet, which is not accessible to any unauthorized person, and the record upon wnich consequently cannot be changed, and also with a similar roll containing duplicate checks, which are adapted to be removed as printed, together with the waiter's check, and which records I have designated as follows: The permanent record, which remains in the machine, I call the "checker's sheet," the duplicate adapted to be separated after printing I call the "duplicate check," and the guest's bill or original order presented by the waiter I call the "check."

In the accompanying drawings, Figure 1 illustrates a plan view of my machine with a portion of the upper part of the casing broken away and a portion of the checker's sheet also broken away; Fig. 2, a transverse vertical section taken on the line *x x*, Fig. 1; Fig. 3, a similar section taken on the line *y y*, Fig. 1; Fig. 4, a transverse vertical section taken on the line *z z*, Fig. 5; Fig. 5, an elevation, partly in section, of part of the mechanism to the left of the line *y y*, Fig. 1, broken. Fig. 6 is a detail view, partly in section, of the inner end of the printing-levers, showing means for controlling the printing-wheel which prints the names of articles on the check, Fig. 9. Fig. 7 is a detail view, partly in section, on the line *z z* of Fig. 1 of the duplicate-check-feeding mechanism. Fig. 8 is a plan view of the checker's sheet; and Figs. 9 and 10, similar views of the check and duplicate check, respectively.

My machine is inclosed in a suitable casing 1, which may be constructed of cast-iron and in which for convenience I prefer to place a top 2, of suitable transparent material, such as glass. This may be placed over the checker's sheet and other parts as well, if desired. The top of the casing is much lower on the left side than the right, the front part of the

top of the said left side being lower than the rear, as seen in Fig. 2.

The check is placed upon a carriage 3, sliding in L-shaped ways 175, Fig. 5, and is provided with wings or flanges 4, adapted to pass between feed-rolls 5 and 6, Fig. 2. Rolls 5 are carried by arms 163, which are keyed upon a shaft 162 and have forwardly-extending lugs receiving one end of a spiral compression-spring by which the rolls 5 are normally pressed against feed-rolls 6.

The check, Fig. 9, is provided with notches 7 and 8. The notch 7 at the left of the check controls mechanism by which the waiter's number is printed upon the checker's sheet and duplicate check, and notch 8 controls similar mechanism by which the number of the check is printed upon the same records. Notch 8 will be varied in position upon the edge of the check to correspond with the serial numbers upon the checks, and notch 7 will be in the same position upon all the checks of any particular waiter.

As carriage 3, carrying the check, is pushed forward by hand finger 9, carried by arm 10, will be pressed against its under side by retraction-spring 12, secured to the bottom of the casing 1 and to a lug projecting forwardly from shaft 11, which is supported by brackets 173 and 174 and to which said arm 10 is fixed, and said finger 9 will enter the notch 7 in check, Fig. 4, when said notch comes in position above it and cause rock-shaft 11 to rock.

Fixed upon rock-shaft 11 and projecting rearwardly therefrom are two printing-levers 13 and 14, which bear upon their rear upwardly-extending ends printing-hammers 15. Carriage 3 has attached to its rear end a feed-rack 16, meshing in pinion 17, carried by the shaft 18, journaled in brackets projecting rearwardly from casing 1, Fig. 2, which also carries pinion 19, meshing in a gear-wheel 165, fixed upon a loose sleeve surrounding the main printing-shaft 20, Fig. 5. Fixed upon the same sleeve on said shaft 20 are the printing-wheels 21 and 22, which bear upon their peripheries printing characters corresponding to the waiter's numbers desired to be printed and which are so located upon the main printing-shaft as to normally present a blank space at the printing-point. This is also true of all the printing-wheels which I make use of. The wheel 21 is located above the hammer 15, carried by printing-lever 13, and between them is the duplicate check, so situated that when the hammer 15 of said lever 13 strikes its blow by finger 9 entering notch 7 the appropriate number of the waiter will be printed under the heading "Waiter No." in the duplicate check. Printing-wheel 22, which has a corresponding series of figures and is located over that part of the checker's sheet entitled "Waiter No.," will at the same time be caused to print the same waiter's number in the said column through impact of the hammer 15, carried by printing-lever 14.

The construction and operation of the mechanism for printing the check-numbers upon the duplicate check and the checker's sheet is the same as that just described for printing the waiter's number. Rock-shaft 23, journaled in brackets 174, has fixed upon it an arm 24, which terminates at its rear end in a finger 25 and is so situated as to enter notch 8 in the check. Fixed upon rock-shaft 23 are printing-levers 26 and 27, carrying at their rear end printing-hammers 166, which are located beneath printing-wheels 28 and 29, fixed upon the loose sleeve on shaft 20, which carries printing-wheels 21 and 22 and which print the appropriate check-number upon the duplicate check and the checker's sheet, respectively, upon receiving the impact of the hammers carried by levers 26 and 27.

It is immaterial which is printed first—the waiter's number or the check-number. I have described first the printing as effected by the wheels printing the waiter's number; but it is evident that this is controlled by the relative position of the notches 7 and 8. In the drawings, Fig. 9, the notch 8 would first be operative, which would cause the printing to first take place by wheels 28 and 29 printing the check-number.

The fingers 9 and 25 are rounded on their upper ends, so as to readily enter and pass out of the notches 7 and 8 in the check without mutilating same. If desired, small wheels might be provided at the upper ends of said fingers, which might more effectually accomplish this object.

The check is maintained in position upon the table 3 by a roll 30, Figs. 2 and 4, journaled in bearings in the casing 1, and which extends across the carriage 3 above the check thereon and adjacent to the fingers 9 and 25.

The notched check, Fig. 9, bore upon its face when it was supplied to the waiter numerals indicating the number of the waiter and the serial number of the check. Consequently no provision is necessary to print such numbers on said check. The numbers printed on the duplicate check and the checker's sheet will be duplicates of those appearing on the said check, and thereby the identity of the order which is to be entered with that appearing on the check is preserved.

Upon the completion of the foregoing operation the carriage 3 is pushed back to the position shown in Fig. 2, when a spring-detent 31, Fig. 2, (shown also in dotted lines in Fig. 1,) supported by a bar extending across the under side of the carriage 3 will enter the first of a series of equidistant holes 32, (shown in dotted lines in Fig. 4,) formed in the under side of carriage 3. The check is now in position to have printed upon it the [illegible] nd

price of the article ordered; but as the mechanism for doing this is controlled by the mechanism for printing the same information upon the checker's sheet I will first describe the latter mechanism.

The checker's sheet, Fig. 8, is divided into a series of vertical columns, the first of which is entitled "Serial No." This is a series of permanent numbers printed on the checker's sheet before it is placed in the machine, as shown in Fig. 1. The second and third columns are entitled, respectively, "Waiter's No." and "Check No.," and the mechanism for printing the proper numbers in the columns bearing these titles has been described. Following these two columns are a number of vertical columns entitled "Food," "Wine," "Cigars," "Drinks," "Oysters," &c., and the space under these titles is designed to have printed upon it in the same horizontal line in which the waiter's number and check number have been printed, the price charged for the article appearing at the top of the vertical column in which said price is printed.

A series of plungers is provided which operate the printing-wheels for printing upon the checker's sheet the price of the articles ordered. As shown in Figs. 2 and 3, these are arranged in three horizontal banks, and I have designated the plungers there illustrated as 33, 34, and 35. The said plungers have upon their forward ends keys or push-buttons which bear figures corresponding to the various amounts desired to be printed, those in the upper bank bearing numbers from "$10" to "$90," inclusive, those in the middle bank bearing numbers "10c.," "20c.," "30c.," "40c.," "50c.," "60c.," "70c.," "80c.," "90c.," and "00c.," and those in the lower bank "$1," "$2," "$3," "$4," "$5," "$6," "$7," "$8," "$9," and "$0." The rearward movement of these plungers is limited by a collar 37, which is secured to the plunger by a rivet or set-screw. Plungers 33, 34, and 35 are those situated at the left of the three banks of plungers and have a corresponding amount of rearward motion, and the plungers situated to the right of 33, 34, and 35 in each bank will have a progressively-increasing extent of rearward motion, those plungers situated at the extreme right of each bank having the greatest extent of motion. The extent of such motion is regulated by the position of the collar 37 upon the plunger. In Fig. 1, where is illustrated the upper bank of plungers, I have designated the plunger at the extreme right as 36. It will be observed that the collar 37 is so situated on plunger 36 as to allow the maximum amount of rearward motion to its plunger, the corresponding collars to the left being located a progressively-diminishing distance from the bosses 38 on the casing 1.

The plungers in the three banks are in vertical alinement.

39 designates the bosses for the second bank of plungers, and 40 a shoulder on the casing, which forms the stop for the third bank of plungers.

Plunger 33 on its inner end bears against a rod 41, which extends across the entire space occupied by the upper bank of plungers and is mounted so as to swing. This rod 41 at each end is mounted in the upper arms of levers 42, which are fixed to a rock-shaft 43 and at their lower ends carry toothed segments 44. These mesh in movable racks 45, which engage gear-wheels 46, fixed upon the main printing-shaft 20. Therefore as the plunger 33 is pushed in the shaft 20 will be partly revolved and will cause a corresponding revolution of a series of printing-wheels 47, likewise fixed to the printing-shaft 20. There are as many of these printing-wheels 47 as there are columns upon the checker's sheet in which the price of articles is to be printed, and they bear upon their peripheries figures from "1" to "9," inclusive, and are designed to print tens of dollars. For instance, the sixth order on the checker's sheet is "Wine $11.50." The printing-wheel 47 will by the operation of that plunger 33 having the figures "$10" on its push-key be revolved so that the figure "1" will be in a position to print as the first figure of "$11.50" and will be locked in such position by spring-pressed pawl 48, which engages in the teeth of a segmental rack 49, mounted on rock-shaft 43, as clearly seen in Fig. 3. This segmental rack 49 may be mounted at the extreme right-hand end of the shaft 43, but is not shown in Fig. 1, being omitted for the sake of clearness. It will lock in printing position all the printing-wheels printing tens of dollars.

Plunger 34, which operates the printing-wheels for printing dimes or multiples thereof, bears against the rod 50, which is mounted in the upper arms of levers 51, which are fixed on a rock-shaft 52. The lower ends of these levers carry toothed segments 53, which mesh in movable racks 54, which at their rear ends engage the teeth of gear-wheels 55, loosely mounted on a sleeve loosely carried by main printing-shaft 20. Fixed upon the gear-wheels 55 is a connecting-bar 56, which is also fixed to a series of printing-wheels 57, which are loosely mounted upon a sleeve carried loosely by the printing-shaft 20.

There are as many wheels 57 as there are columns containing designations of "Food," "Wine," "Drinks," &c., in the checker's sheet, and they all bear the same printing characters upon their peripheries—to wit, "10," "20," "30," "40," "50," "60," "70," "80," "90," and "00."

When the plunger 34 bearing the figures "50c." is pushed in, the printing-wheels 57 will be revolved in the same direction in which printing-wheels 47 revolve, and the

rearward movement of the plunger being limited by collar 37 the printing-wheels 57 will stop with figures "50" in the printing position. The printing-wheels 57 will be locked in printing position by a pawl and ratchet similar to 48 and 49, mounted on rock-shaft 52, but not shown for sake of clearness.

Plunger 35, which controls the printing-wheels printing units of dollars, bears on its rear end against a rod 58, which extends across and in the rear of the entire lower bank of plungers and which passes through levers 59, which are located at the ends of said rod. Said levers 59 are fixed on rock-shaft 60, which is located above the rod 58, and at their lower ends carry toothed segments 61, which mesh in movable racks 62, that engage gear-wheels 63, which are fixed to the sleeve on the main printing-shaft 20, on which gear-wheels 55 are loosely mounted. Fixed to the gear-wheel 63 is a connecting-bar 64, which is also fixed to each of the series of printing-wheels 65. Each of these printing-wheels 65 bears upon its periphery the figures "1," "2," "3," "4," "5," "6," "7," "8," "9," and "0." These printing-wheels are fixed to the sleeves on printing-shaft 20, upon which printing-wheels 57 are loosely mounted.

Upon pushing rod 35 rearwardly printing-wheels 65 will be partially revolved in a direction opposite to printing-wheels 47 and 57, the amount of revolution being limited by collar 37 on said plunger until the figure "1" is in the printing position, in which position the said wheels are locked by a ratchet and pawl similar to 48 and 49, but fixed on rock-shaft 60 and omitted for the sake of clearness.

It will be perceived that we have now set and locked in printing position over the checker's sheet the figures "11.50" in the entire nineteen series of printing-wheels, each series containing one of each of the wheels 47, 65, and 57, and that said figures can be printed in any desired column upon the checker's sheet. In the instance above referred to it is desired that these figures should be printed in the column entitled "Wine." This is accomplished by means of a printing-lever 66, which is fixed upon a rock-shaft 67, Fig. 3, and has at its rear end a printing-hammer 68. By depression of the key 66 the printing-hammer 68 under the "Wine" column in the checker's sheet, which is between the said hammer and the printing-wheels, will strike the back of the checker's sheet and cause the wheels 47, 65, and 57 to print "11.50," as stated.

I have stated that 68 is the printing-hammer upon the printing-lever 66, whereas Fig. 3 shows that the part there visible and designated 68 is attached to printing-lever 69, fixed upon shaft 70.

There are a series of printing key-levers which at their forward ends are provided with finger-keys 71, arranged in two horizontal rows, as shown in Fig. 1. These finger-keys 71 bear the names of the various articles printed at the head of the columns in the checker's sheet, as "Food," "Wine," "Drinks," &c., there being as many finger-keys 71 and connected levers and printing-hammers as there are columns in the checker's sheet in which the prices of articles are to be printed.

The printing-lever 69 will have on its finger-key the designation "Food," and printing-lever 66 will have on its finger-key "Wine." Finger-key attached to lever 72 bears the word "Cigars." This lever is fixed upon shaft 73. Finger-key attached to lever 74 bears the word "Drinks," and this lever is fixed upon shaft 75. Finger-key attached to lever 76 bears the word "Returned," and this lever is fixed upon shaft 77. The finger-keys attached to all the other printing-levers between 74 and 76, fourteen in number, bear the designation "Oysters," "Soup," "Fish," &c., as the same appear between the words "Drinks" and "Returned" in the checker's sheet, and all of these printing-levers are mounted loosely upon the "Food" shaft 70, upon which the "Food" lever 69 is also loosely mounted.

The rear ends of the printing-levers 66 69, &c., all terminate in printing-hammers, such as 68, arranged in the same horizontal and vertical planes.

I will now describe the mechanism for printing on the duplicate check, Fig. 10, which has already been printed by my machine with the waiter number and check number.

The roll of duplicate checks before it was placed in the machine bore numbers corresponding to the serial number of the checker's sheet which was printed coincidentally with each duplicate check. It will be observed that this contains less designations for articles ordered than does the checker's sheet, having only "Food," "Wine," "Cigars," "Drinks," and "Returned." The machine is so arranged, therefore, that upon the operation of the levers 69, 66, 72, 74, and 76, which cause the printing in the "Food," "Wine," "Cigars," "Drinks," and "Returned" columns in the checker's sheet, the same figures will be printed in the corresponding columns in the duplicate check, and upon the operation of any of the levers between levers 74 and 76 the same figures as are printed in the appropriate columns in the checker's sheet controlled by these levers will also be printed in the duplicate check in the "Food" column.

Keyed upon the shaft 20 are a series of printing-wheels 77^{A}, five in number, each of which bears upon its periphery the numerals

"1" to "9," inclusive, arranged in alinement with the corresponding figures upon printing-wheels 47 and rotating in unison therewith and adapted to print tens of dollars.

Meshing with the gear-wheel 63 is a pinion 78, keyed upon a revolving counter-shaft 79, which is journaled in bearings in brackets 80 and 167, projecting from the walls of the casing 1, Figs. 2 and 3. Keyed upon the same shaft 79 is a pinion 81, which meshes in a wheel 82, having teeth upon a portion of its periphery and fixed upon a sleeve revolubly mounted on main printing-shaft 20. Attached to wheel 82 is a connecting-bar 83, which is also attached to a series of wheels 84. Wheel 82 and wheels 84, five in all, each have upon their peripheries the numerals "1, 2, 3, 4, 5, 6, 7, 8, 9, 0" in alinement with similar characters upon the wheels 65 and adapted to rotate in unison therewith and to print units of dollars.

Meshing with the gear-wheel 55 is a pinion 85, keyed upon shaft 86, which is journaled in bearings in the brackets 80 and 167. (Not shown in Fig. 1.) Keyed upon shaft 86 is a pinion 87, which meshes in a wheel 88, having teeth upon a portion of its periphery and which is revolubly mounted upon the same sleeve on main printing-shaft 20 to which wheel 82 is fixed. Attached to wheel 88 is a connecting-bar 89, which is also attached to a series of printing-wheels 90. Wheel 88 and wheels 90 have upon their peripheries figures "10," "20," "30," "40," "50," "60," "70," "80," "90," and "00," arranged in alinement with the same figures upon the printing-wheels 57 and turning in unison therewith.

Wheels 77[A] are adapted to print in the space appropriated to tens of dollars, wheels 82 and 84 in the similar space for units of dollars, and wheels 88 and 90 in the space for dimes.

From the foregoing it is apparent that upon the operation of the plungers 33, 34, and 35, which bear the figures "$10," "$1," and "50c." upon their keys, each of the five series of printing-wheels 77[A], 82, 84, and 88 90 will be in a position to print "$11.50" upon the duplicate check which is then in printing position under said wheels.

Each printing-lever rock-shaft 67, 70, 73, 75, and 77 is journaled at its left end, Fig. 1, in one of a series of posts 91, rising from the base of the casing 1, and has fixed upon it a rearwardly-projecting arm 92, terminating in a printing-hammer 93, (shown in dotted lines under connecting-bar 89, Fig. 1.) The printing-hammers 93 are in the same horizontal and vertical planes and are adapted to strike under the printing-point to which the printing-points 77[A], 82, 84, and 88 90 are set in such a manner and are wide enough as to cause the characters upon all three of said wheels to print upon the duplicate check. Each of the arms 92 is retracted by a spiral spring 169, Fig. 2, and will also have a similar retraction-spring (not shown) attached to the rear of each printing-lever 69, &c., under hammer 68, for instance, and to the floor of the casing 1 to maintain each lever in position.

By depressing "Wine" printing-lever 66 arm 92, attached to "Wine" shaft 67, will cause the printing to occur in the "Wine" column on the duplicate check. Similarly, by depressing "Cigars" printing-lever 72 arm attached to shaft 73 will produce the same result in the "Cigars" column, by depressing "Drinks" printing-lever 74 arm attached to shaft 75 will cause the printing in the duplicate check to occur in the "Drinks" column, and by depressing "Returned" printing-lever 76 arm attached to shaft 77 will produce the same result in the "Returned" column.

All of the printing-levers loosely mounted on the "Food" shaft 70—to-wit, the lever 69 and all the levers between 72 and 76—will print upon the duplicate check under the heading "Food" by means of frame 94, which is, except as to levers 66, 72, and 74, a universal bar. This frame 94 is secured through its two side arms upon the food rock-shaft 70. The front bar 95 of this frame 94 is bent at 96 under the levers 66 "Wine," 72 "Cigars," and 74 "Drinks," as clearly shown in Figs. 1 and 3, and it likewise has a bend under lever 76 "Returned." Upon depressing the "wine" lever 66 it will, being fixed upon rock-shaft 67, cause said shaft to rock, whereby that one of the arms 92 carrying printing-hammer 93, which is attached to shaft 67 and under "Wine" on the duplicate check, will cause the proper figures to print in "Wine" column. In the case supposed, the figures "$11.50" having been brought into printing position will be printed in both the checker's sheet and the duplicate check under "Wine" be depressing the "Wine" finger-key attached to lever 66. The operation of levers 72 "Cigars," 74 "Drinks," and 76 "Returned" is the same as the "Wine" lever 66. Each of the said levers causes the printing to occur simultaneously in the corresponding columns in the checker's sheet and duplicate check by similar means. The balance of the printing-key levers lying between 74 and 76, Fig. 1, as well as the "Food" lever 69, are all journaled loosely upon the "Food" shaft 70 and are in operative position over the bar 95, which is fixed upon the "Food" shaft 70, whereby the operation of any of the last-mentioned levers causes the printing to occur in the checker's sheet upon the column corresponding to the lever operated and in the duplicate check upon the "Food" column.

I will next describe the mechanism by which I cause the printing of the article and the price to occur upon the check, Fig. 9.

Each of the printing-levers 66 69 72 &c., to and including 76, has at its rear end an upwardly-extending projection 97, which lies under fingers 98, projecting from a hub 99, secured upon rock-shaft 100, which is journaled in posts 101, Fig. 2, projecting from the base of casing 1. Fixed upon the rock-shaft 100 at its left end, Fig. 1, is a hub from which projects an arm 102, having at its end toothed sector 103, which meshes in the teeth of a gear-wheel 104, which has teeth for only a portion of its periphery. This gear-wheel 104 is fixed upon a sleeve 105, loosely mounted on printing-shaft 20, and to which sleeve is rigidly secured printing-wheel 106, which bears upon its periphery the names of all the articles appearing on the checker's sheet.

The fingers 98 vary in length for the different printing-levers 66 69 72 &c., that one of the arms 98 operated by printing-key lever 69 being the shortest and that one operated by the lever 76 the longest, as shown by dotted lines in plan view, Fig. 1.

Figs. 2 and 3 show the forward ends of the arms 98, more clearly shown in detail in Fig. 6.

The operation of the different printing-levers 66 69, &c., will rock shaft 100 varying degrees and cause such a rotation of printing-wheel 106 that the name of the article corresponding to the printing-lever depressed will be brought into printing position.

Wheel 107 is keyed upon printing-shaft 20 and is a printing-wheel bearing upon its periphery characters "1," "2," "3," "4," "5," "6," "7," "8," and "9" and adapted to print tens of dollars. This wheel will be revolved as the shaft 20 is revolved by the operation of the plunger 33 and will present the same figures in position to print on the check, as do the printing-wheels 47 and 77[a] on the checker's sheet and duplicate check, respectively.

Printing-wheel 108 is fixed upon a sleeve revolubly mounted upon printing-shaft 20 and carries printing characters "1," "2," "3," "4," "5," "6," "7," "8," "9," and "0" and is adapted to print units of dollars. This wheel 108 has teeth upon a portion of its periphery into which mesh the teeth of pinion 109, keyed upon counter-shaft 79.

As plunger 35 is operated printing-wheels 65, 82, 84, and 108 will be correspondingly revolved and will present the same characters in printing position over the checker's sheet, duplicate check, and check, respectively.

Loosely mounted upon the sleeve on printing-shaft 20, to which printing-wheel 108 is fixed, is a printing-wheel 110, which is geared for a portion of its periphery and has upon the balance thereof printing characters "10, 20, 30, 40, 50, 60, 70, 80, 90, 00," adapted to print in the cents column on the check. The teeth on wheel 110 are in mesh with pinion 111, which is keyed on shaft 86.

As plunger 34 is operated printing-wheel 110 is revolved in unison with printing-wheels 88, 90, and 57 and presents the same characters in the printing position for printing on the check as said wheels 88, 90, and 57 do for printing on the duplicate check and checker's sheet, so that in the particular instance supposed the operation of plungers 33, 35, and 34 bearing the amounts "$10," "$1," and "50c" will present, ready to print the amount "$11.50" in the check, as well as in the duplicate check and checker's sheet, and the depression of the "Wine" printing-lever 66 will have caused the word "Wine" on wheel 106 to be brought to printing position. When the said word is in printing position, the carriage 3 will be held in position to print on the check by feed-rolls 5 and 6 and by spring-detent 31 entering one of the holes 32.

A frame 112 carries a universal bar 113, which lies under all the printing-levers 69 66 72 74, &c., and is operated by the depression of any of said levers. This frame is fixed on shaft 114, which carries at its left end, Fig. 1, a rearwardly-projecting hammer-arm 115, which terminates in a printing-hammer 116, which lies under the entire line to be printed upon in the check. Therefore the depression of the "Wine" printing-key lever 66 will not only bring "Wine" into printing position, but will cause said word, as well as the figures "11.50," to be printed upon the check.

Loosely mounted on shaft 100 is a series of hubs 117, having projecting cam-levers 118, each of which carries a pin 119, which is located under one of the projections 97 on printing-levers 66 69, &c., and each of which has a loop 120, which passes over one of the fingers 98. Therefore as the printing-lever 69, for instance, is restored to its normal position through spring 121, shaft 114, and frame 112 it will through pin 119, cam-lever 118, and loop 120 return finger 98 to its normal position and at the same time through shaft 100, arm 102, toothed sector 103, and gear 104 also restore printing-wheel 106 to its normal position. The retracting motion of spring 121 is against a counterweight 122, borne by arms projecting rearwardly from collars 123, keyed on shaft 100, which counterweight assists in setting wheel 106.

Keyed upon shaft 114 is one arm of a compound lever 124, the rear arm 125 of which is journaled in a post 126, attached to the base of the casing 1. Pivoted to the forward part of said arm 125 is a vertical rod 127, guided at its upper end by a bracket 128, which may be affixed to the inner right-hand wall of the casing 1; but said rod, bracket, and compound lever are omitted from Fig. 1 for the sake of clearness. Rod 127 has a spring-pressed pawl 129, the lower end of which rides over a lug 130 on pawl 48 on ascending, but which on descending engages

said lug, being held against it by stop 131, which engages the upper arm of pawl 129 and throws the said pawl 48 out of contact with ratchet 49 and permits the retracting-spring 132 to return plunger 33, shaft 41, lever 42, rack 45, gear-wheel 46, and printing-wheels 47, 77[A], and 107 on printing-shaft 20 to normal position.

Plungers 34 and 35 are provided with similar retracting-springs 133 and 134, and their connected parts have similar locking means to that employed in connection with plunger 33 for locking the wheels which print tens of dollars. These can be released by rods similar to rod 127, which may be pivoted to the forward end of lever 125, but are omitted from the drawings for the sake of clearness.

I will next describe the feeding mechanism.

The checker's sheet, while shown in Fig. 8 as a chart or ticket, will actually be a continuous sheet of paper in the form of a roll, designated 135 in Fig. 3, and the titles printed on Fig. 8 may be suitably inscribed upon a plate in position corresponding to the spaces occupied by the respective columns on the checker's sheet, suitably located, or they may be entirely omitted, as the spaces are indicated by the printing-lever keys 71.

From roll 135, keyed on shaft 176, the checker's sheet is wound on roll 136, passing under an ordinary inked ribbon 137, such as used on type-writers, &c., and which ribbon passes under all the printing-wheels and may be caused to feed by any of the simple feeding devices in use in type-writing machines and may be operated by the universal bar 113 or may be fed by hand. If desired, inking-rollers may be used instead of ink-ribbons.

Fixed upon the shaft 114 of the universal bar 113 are arms 138, Fig. 3, which are connected by links 139 to swinging arms 140 and 141, one of which, 141, is seen in dotted lines in Fig. 3. These swinging arms 140 and 141 are loosely mounted on the main feed-shaft 142, which is journaled in brackets 168, 143, and 144. Mounted between the outer ends of said swinging arms 140 is a shaft 145, upon a fixed sleeve on which is wound the printed checker's sheet. Carried by the swinging arm 141 is a pawl 146, Fig. 3, having a weighted end 147, whereby it is maintained in contact with a ratchet-wheel 148, fixed upon the main feed-shaft 142. 149 is a detent mounted on a stud screwed into bracket 144 and engaging the teeth of ratchet 148.

Upon the depression of any printing-key lever, the universal bar 113 is depressed, rocking shaft 114 and causing roll 136 to be pulled forward by vertical arm 138 and link 139. As roll 136 moves forward it is caused to revolve, being in frictional contact with friction-rollers 150, fixed on shaft 142, and the slack in the checker's sheet caused by the forward movement of the roll 136 is taken up by the revolution of said roll on friction-roll 150, which is held from rotating by detent 149. Upon the release of the printing-key and the return movement of the printing-key lever and universal bar 113 shaft 114 will be returned to its normal position by retraction, spring 121, and arm 138 and link 139 will move roll 136 backward, and at the same time friction-rolls 150 on shaft 142 will be moved one tooth of the ratchet-wheel 148 by pawl 146, whereby a fresh line on the checker's sheet is brought to the printing-point.

Friction-rolls 150 may be composed of a metal core surrounded by a rubber shell, and should it be found in practice that the checker's sheet is too thick on the sleeve on shaft 145 to enable it to work properly the said shaft may be mounted in slots in the swinging arms 140 and 141 and be spring-held, so as to maintain the roll 136 in proper yielding frictional contact at all times with friction-rolls 150.

If desired, shaft 176 may be extended through the right-hand wall of casing 1 and there provided with a milled hand-wheel, and shaft 145, which will in that event be mounted in slots in arms 140 141 and spring-held against roll 150, may be provided with a handle, such as 161, which, if necessary, may have a pin for throwing pawl 146 out of engagement with ratchet-wheel 148. By these means roll 136 may be released and wound backward upon 135, so that, if desired, the entire printed checker's sheet may be inspected through glass top 2.

The mechanism for feeding the duplicate check is illustrated in section in Fig. 7, in which 151 is the roll of blank duplicate checks mounted on a shaft 170, carried by brackets 171, projecting rearwardly from the upper part of casing 1, and 152 and 153 are friction-rolls which feed the duplicate check as desired. Roll 152 is mounted on a shaft 154, which is carried by brackets 168, one of said brackets being illustrated in Figs. 1 and 7, and the other one, which is located at the opposite end of shaft 154, not being shown. Shaft 155, also journaled in brackets 168, carrying friction-roll 153, has fixed upon it a spur-gear 156, (shown in dotted lines in Fig. 1,) which is driven through idler 157, carried by a pivot on bracket 168, by gear-wheel 158, fixed on main feed-shaft 142.

A shelf 159 is adapted to receive the printed duplicate checks which emerge through the casing 1 at opening 160.

It is obvious that gears 156, 157, and 158 must have such relative size that the duplicate-check will feed fast enough to cause the printed duplicate to pass outside of friction-rollers 152 and 153, so that it may be extracted from the machine after it is printed and before the next duplicate check is printed. To expedite the severing of the

printed upon the check from the strip of such checks, they may be perforated, as shown at Fig. 10, and torn off as printed, or a knife may be introduced to cut them off at regular intervals.

The check, Fig. 9, is fed by friction-rolls 6, which are fixed upon shaft 142 and which grip the wings or flanges 4 on carriage 3 by means of yielding friction-rolls 5. Upon the feeding of the carriage 3 in position to print a fresh line on the check the detent 31 will emerge from one of the holes 32 and engage the next one, thus centering the carriage and causing the printing to register. The check after the printing is finished emerges from the casing at 177.

Should it be desired after printing upon the check, Fig. 9, to again insert the check in the machine for the purpose of printing another item thereupon, the lower friction-rollers 5 may be lowered out of operative position through handle 161, which is attached to the arm 163, carrying one of the friction-rollers 5, a depression of which handle will release both rollers through shaft 162, to which the roller-carrying arms 163 are keyed. The correct position of the check for such additional printing can readily be determined by the spring-detent 31. Upon the reintroduction of the check it will first cause the waiter's and check numbers to again print in the manner already described, and then it will be pushed rearward until the wings or flanges 4 strike the feed-rolls 5 6, at which time the spring-detent 31 will enter the first of the holes 32 on the under side of the carriage 3. Should the additional printing be destined to appear in the fourth line of the check, the handle 161 will be depressed, so that the main feed-shaft will not be turned by feeding in the carriage, which would cause blank spaces to appear on the checker's sheet and the duplicate check, and the carriage will be pushed in until three more clicks announce that the spring-detent 31 is in the fourth hole 32, when the handle 161 may be released, and the machine is ready for operation, or, if desired, other means may be employed to indicate the position of the carriage 3 with respect to the printing-point, such as a pointer on the outside of the casing, indicating on a scale such position, which might be geared upon shaft 18, which could be extended for that purpose to the left-hand side of the machine, Fig. 1, through the casing.

It will be apparent that my machine is adapted to print upon all three records sums varying from ten cents to ninety-nine dollars and ninety cents and that the object of arranging the numeral-printing wheels in sets of three is to enable the machine to print a more extended range of figures than would be possible with a smaller number of numeral-printing wheels in each set. Where the machine is required to print only such figures as may be easily applied to the periphery of a single printing-wheel—*e. g.*, from ten cents to one dollar—the construction of the machine may be much simplified, while at the same time the main features of my invention will be preserved. The three wheels adapted to print in the price-column I call a "set" of wheels and the multiplication of such a set a "series."

The operation of my machine, which is apparent from the foregoing description, is as follows: We will assume that it is desired to record an order for waiter No. 2 of oysters, the price of the food being two dollars and the waiter's serial check-number being "6," also that this is the first order of the day to be entered. The check, Fig. 9, will be placed upon the carriage 3 and the carriage pushed in until the notch 8 on the right-hand side of the check encounters the finger 25. The feeding forward of the carriage 3 will, through pinion 17, shaft 18, pinion 19, gear 165, and shaft 20, partially rotate the printing-wheels 28 and 29, keyed on a sleeve loose on said shaft 20 for printing the check-number, and the rocking of shaft 23 through finger 25 entering notch 8 in the check will cause printing-hammers on arms 26 27 to strike the under side of the duplicate check and checker's sheet, printing upon them the check-number "6" in the check-number columns. A continued feeding in of carriage 3 will cause shaft 20 to further revolve until the carriage is stopped by finger 9 entering notch 7, at which time the waiter's number "2" will have been brought to printing position on printing-wheels 21 and 22 and will be caused to print "2" in the "Waiter's No." column on the duplicate check and checker's sheet by impact of printing-hammer on printing-levers 13 and 14, carried by rock-shaft 11, which is rocked by finger 9 on arm 10, entering notch 7 in the check. Carriage 3, carrying the check, will then be pushed in until the wings or flanges 4 encounter the feed-rolls 5 6, at which time the spring-detent 31 will enter the first of the recesses 32 in the under side of the carriage, and the machine will be ready to print the other data desired. That one of the plungers 35 which bears the the designation "$2" on its push-button will then be pushed in until collar 37 strikes shoulder 40, causing toothed sector 61 to move rack 62 rearwardly and gear-wheel 63, connecting-bar 64, and connected printing-wheels 65 forwardly, bringing the figure "2" upon the wheels 65 in position to print in the units-of-dollars space upon the checker's sheet where they are locked by pawl and ratchet similar to 48 49. Simultaneously the figure "2" upon printing-wheels 108, 82, and 84 will be brought to printing position over the check and duplicate check through gear-wheel 78, shaft 79, gears 81 and 109, and par-

tial gears on wheels 108 and 82 and bar 83, connecting wheels 82 and 84. Inasmuch as the item under consideration costs less than ten dollars, no operation of the plungers 33 is necessary. That one of the plungers 34 bearing on its key the figures "00" will then be pushed and will cause printing-wheels 57 to rotate so as to bring "00" to the printing-point over the cents-space in the checker's sheet through rod 50, arm 51, toothed sector 53, rack 54, and gear 55 and connecting-bar 56. Simultaneously the printing-wheels 110, 88, and 90 will bring the figures "00" in position to print in the cents-column on the check and duplicate check. All of said printing-wheels will then be locked in position by a pawl and ratchet similar to 48 49. Printing-lever bearing on its key the word "Oysters," and which I will designate for convenience as 172, will then be depressed and will by its projection 97 elevate one of the fingers 98, attached to rock-shaft 100, and raise the same until the projection slips out of contact with said finger. The rocking of shaft 100 will, through toothed sector 103 on arm 102, keyed on said shaft, and gear 104, revolve a sleeve on main printing-shaft 20, which carries printing-wheel 106. A continued depression of printing-lever 172 will cause hammer 68 attached thereto to print "2.00" in the "Oyster" column on the checker's sheet. Simultaneously through universal bar 95 the "Food" shaft 70 will be rocked and its arm 92 will cause printing-hammer 93 to print "2.00" in the "Food" column on the duplicate check. At the same time universal bar 113 will be depressed, rocking shaft 114 and causing printing-hammer 116, attached to arm 115, to strike the under side of the check, whereby "Oysters 2.00" will be printed thereon. Upon releasing printing-lever 172 it will be retracted by spring 121 and by its independent spring, heretofore referred to but not shown, and will release the lock for the printing-wheels through parts similar to rod 127, bracket 128, pawl 129, lug 130 on pawl 48, and stop 131 on rod 127, operating, respectively, on pawl and ratchet 48 and 49, fixed on shafts 52 and 60, respectively, and will at the same time by the projection 97 bear upon pin 119 on cam-lever 118 and through loop 120 and finger 98 rock shaft 100, thereby returning printing-wheel 106 to normal position through arm 102, toothed sector 103, gear 104, and sleeve on shaft 20. When arm 138 on shaft 114 was moved forward by the depression of bar 113 through the depression of printing-lever 172, it carried forward also link 139, swinging arms 140 141, and roll 136 on shaft 145, thereby causing pawl 146 to move a tooth on ratchet-wheel 148. Upon the rearward movement of 138 and link 139 ratchet-wheel 148 will be moved the space of one of its ratchet-teeth by pawl 146 and will, through the contact of friction-roll 150 with the printed checker's-sheet roll 136, cause the latter to feed the space of one line on the checker's sheet, thereby bringing a fresh line in printing position. The same movement of shaft 142 will, through gear-wheels 158, 157, and 156 and friction-rolls 153 and 152, remove the printed duplicate check from under its printing-wheels and cause a new duplicate check to come into printing position. At the same time rolls 6, keyed on shaft 142, will feed forward the carriage 3, carrying check, Fig. 9, by engaging wings or flanges 4 between them and rolls 5. When it is desired to withdraw the printed check, the carriage 3 can be pushed to its extreme rearward position and the check withdrawn through a slot in the frame, (not shown,) the lower rolls 5 being depressed by the handle 161 and causing the lugs or flanges to pass between rolls 5 and 6 without revolving feed-shaft 142. The return movement of the carriage will cause the printing-wheels carrying the waiter and check numbers 21, 22, 28, and 29 to resume their normal positions.

In my drawings I have shown wheels bearing the printing-types, and in many of the claims I have referred to "printing-wheels;" but I do not thereby wish to confine myself to the use of said wheels, as many other forms of type-carriers—*e. g.*, segments or bars—might answer. Likewise with relation to the plungers and printing-levers the devices I have shown are only one method of embodying my invention, and it is obvious that many changes and modifications may be made in my apparatus without departing from the general nature thereof, and I do not limit myself to the specific mechanism illustrated; but

What I claim, and desire to secure by Letters Patent, is—

1. In a check-printing machine, mechanism for printing desired characters on a check, mechanism for printing the same characters in any column selected by the operator in a series of vertical columns on a laterally-stationary checker's sheet, and operating means common to both said mechanisms, as set forth.

2. In a check-printing machine, mechanism for printing desired characters on a check, mechanism for printing the same characters in any column selected by the operator in a series of vertical columns on a laterally-stationary checker's sheet, mechanism for printing on the check the names of articles purchased, and operating means common to all of said mechanisms, as set forth.

3. In a check-printing machine, means for simultaneously printing desired characters on both a check and a checker's sheet, and

means controlled by the check for selecting and printing check-identifying characters on said sheet, as set forth.

4. In a check-printing machine, means for printing desired characters on an original check, a duplicate check, and a checker's sheet, and means controlled by the check for selecting and printing check-identifying characters on said sheet, as set forth.

5. In a check-printing machine, means for simultaneously printing desired characters on both a check and a checker's sheet, means for printing on the check the names of merchandise purchased, and means controlled by the check for selecting and printing check-identifying characters on said sheet, as set forth.

6. In a check-printing machine adapted to print by a single operation an original and one or more duplicate checks, printing mechanism for each check, means for adjusting the same according to the character to be printed, and means for imprinting the selected characters on one or more checks at points thereon selected by the operator, as set forth.

7. In a check-printing machine for printing by a single operation an original and one or more duplicate checks, price-printing mechanism for each check, means for adjusting the same according to the characters to be printed, and means for imprinting the selected characters upon the duplicates at points thereon predetermined by the nature of the merchandise indicated by the original check, as set forth.

8. In a check-printing machine for printing by a single operation an original and one or more duplicate checks, price-printing mechanism for each check, means for adjusting the same according to the characters to be printed, means for imprinting upon the duplicates the selected characters at points predetermined by the nature of the merchandise indicated by the original check, and means for printing on the latter the names of such merchandise, as set forth.

9. In a check-printing machine for printing at a single operation an original and one or more duplicate checks, price-printing mechanism for each check, means for adjusting the same according to the characters to be printed, mechanism for printing the names of merchandise on the original check, and means for imprinting upon the duplicate checks the selected price characters in columns thereon corresponding to the names of the merchandise printed on the original check, as set forth.

10. In a check-printing machine, printing mechanisms for printing on a check the names of merchandise and the prices thereof, a plurality of price-printing mechanisms for printing upon a checker's sheet, and means for simultaneously operating the check-printing mechanisms and a selected sheet-printing mechanism for printing the name and price of a desired article on the check and the price thereof at a selected point on the sheet, as set forth.

11. In a check-printing machine, check-printing mechanisms for printing the names of articles and the prices thereof on a check, a plurality of price-printing mechanisms for printing on a duplicate check and a checker's sheet, and a series of manually-actuated key-levers for simultaneously operating the check-printing mechanisms and one each of the sheet and the duplicate-check-printing mechanisms, as set forth.

12. In a check-printing machine, printing mechanisms for operating on a check, independent printing mechanisms for operating on a checker's sheet, and means whereby the operation of one of the sheet-printing mechanisms causes a simultaneous operation of one predetermined check-printing mechanism, as set forth.

13. In a check-printing machine, printing mechanisms for operating on an original check, a duplicate check, and a checker's sheet, and means whereby the operation of one of a plurality of sheet-printing mechanisms causes the simultaneous operation of the original check-printing mechanism and a predetermined duplicate-check-printing mechanism, as set forth.

14. In a check-printing machine, a series of sets of printing-wheels, each set arranged to print in a particular one of a series of columns on a check, a second series of sets of printing-wheels, each set arranged to print in a particular one of a series of columns on a checker's sheet, and a series of printing-levers each adapted to cause a particular set of sheet-printing wheels and a particular set of check-printing wheels to print in their corresponding columns, as set forth.

15. In a check-printing machine, a series of sets of printing-wheels, each set being arranged to print in a particular one of a series of columns on a checker's sheet, means for adjusting all the sets of wheels simultaneously to print as desired, and means for causing a selected set of wheels to print, as set forth.

16. In a check-printing machine, a series of sets of printing-wheels, each set being arranged to print in a particular one of a series of columns on a checker's sheet, means for simultaneously adjusting all the sets to print as desired, and a series of printing-levers each corresponding to a particular set of wheels and adapted to cause the same to print, as set forth.

17. In a check-printing machine, a series of sets of printing-wheels, each set being arranged to print in a particular one of a series of columns on a checker's sheet, means for locking said wheels in desired printing posi-

tion, and means for causing a selected set of wheels to print in its corresponding column, and for releasing the said locking means after printing, as set forth.

18. In a check-printing machine, means for printing characters on a checker's sheet and a duplicate check, an independent check, a movable carriage for the independent check, operatively connected with the said printing means to adjust the same, and means controlled by the independent check for determining the extent of adjustment of the said printing means, as set forth.

19. In a check-printing machine, means for printing characters on a checker's sheet and a duplicate check, an independent check having a lateral notch, a movable carriage for the independent check, operatively connected with the said printing means to adjust the same, and means controlled by the lateral notch in the independent check for determining the extent of adjustment of the said printing means, as set forth.

20. In a check-printing machine, printing-wheels located in position to print a checker's sheet and a duplicate check, an independent check, a movable carriage for the independent check, operatively connected with the said printing-wheels to adjust the same, means controlled by the independent check for determining the extent of adjustment of the printing-wheels, and means for taking impressions from the printing-wheels, as set forth.

21. In a check-printing machine, printing-wheels located in position to print a checker's sheet and a duplicate check, an independent check, provided with recesses, a carriage for the independent check operatively connected with the printing-wheels to adjust the same, fingers adapted to enter the recesses in the independent check operatively connected with the type-wheels to determine the extent of their adjustment by the carriage, and means for taking impressions from the printing-wheels, as set forth.

22. In a check-printing machine, a plurality of printing-wheels arranged to print in corresponding columns on a checker's sheet, and a series of plungers operatively connected with the printing-wheels, each plunger being adapted to shift the wheels to a different extent, as set forth.

23. In a check-printing machine, a plurality of wheels for printing dollars, a plurality of wheels for printing cents, the wheels being arranged in sets so as to print dollars and cents in a plurality of columns, a series of plungers each operatively connected with the dollars-printing wheels, and each adapted to shift the wheels to a different extent, a similar series of plungers for the cents-printing wheels, and means for causing a selected set of wheels to print, as set forth.

24. In a check-printing machine, a plurality of printing-wheels for printing dollars, a plurality of printing-wheels for printing cents, a series of plungers each operatively connected with the dollars-printing wheels and each adapted to shift the wheels to a different extent, a similar series of plungers for the cents-printing wheels, means for locking the printing-wheels in any adjusted position, and means for causing a selected group of wheels to print, as set forth.

25. In a check-printing machine, a plurality of dollars-printing wheels arranged on a common axis, a plurality of cents-printing wheels on the same axis, a series of plungers for adjusting the dollars-printing wheels, each plunger being adapted to adjust all the said wheels to a different extent, a similar series of plungers for the cents-printing wheels, means for supporting a check, a duplicate check, and a checker's sheet in position to be printed by said dollars and cents printing wheels, and means for causing selected groups of wheels to print upon the said check, duplicate check and checker's sheet, as set forth.

26. In a check-printing machine, a plurality of dollars-printing wheels, a plurality of cents-printing wheels, a series of plungers for adjusting the dollars-printing wheels, each plunger being adapted to adjust all the said wheels to a different extent, a similar series of plungers for the cents-printing wheels, means for supporting a check and a checker's sheet in position to be printed by the wheels, a printing-wheel arranged to print on the check the names of articles purchased, and means for causing the check to receive a price and an article imprint and for simultaneously causing a selected group of dollars and cents wheels to print on a selected portion of the checker's sheet, as set forth.

27. In a check-printing machine, a plurality of printing devices each arranged to print in a different column on a checker's sheet, and a series of adjusting devices each adapted to adjust all the said devices to a different extent, and means for causing the sheet to receive an imprint in any selected column, as set forth.

28. In a check-printing machine, a plurality of printing devices arranged to print in different columns, a plurality of adjusting devices each adapted to set one of said printing devices for each column and each setting device being adapted to adjust its printing devices to a different extent from the adjustment effected by the other setting devices, and means for causing the selected column to receive an imprint.

29. In a check-printing machine, a plurality of printing devices arranged to print in columns on a plurality of records, means for adjusting the said devices whereby each record will receive the same imprint, and means for selecting the particular printing devices

desired and causing them to print, as set forth.

30. In a check-printing machine, a plurality of series of printing-wheels, a plurality of series of setting devices for adjusting the wheels, each series of setting devices being adapted to control a corresponding series of wheels and each setting device being adapted to adjust all the wheels of its series to a different extent from the other series, means controlled by the operation of the setting devices for locking the wheels in adjusted position, and means for returning the wheels to normal position, as set forth.

31. In a check-printing machine, mechanism for printing on an original check, a duplicate check, and a checker's sheet, a waiter's number and the check-number, mechanism for printing on the check the names and prices of articles, means for printing on the checker's sheet the prices of the articles, and means operatively connected with the name-printing mechanism for locating the price imprints on the checker's sheet in the columns appropriated to the respective articles, as set forth.

32. In a check-printing machine, mechanism for printing on a check the names of articles and the prices thereof, and mechanism operatively connected with the name-printing mechanism for selecting on a check's sheet the columns appropriated to the respective articles and printing in such columns the prices of the articles, as set forth.

33. In a check-printing machine, a series of printing devices, a series of printing-levers indicating different articles, each lever corresponding to one of the series of printing devices, and a series of printing-hammers actuated by the printing-levers, whereby each lever will cause its particular printing devices to print, as set forth.

34. In a check-printing machine, a plurality of printing devices adapted to print a checker's sheet and a duplicate check, a series of printing-levers indicating different articles, printing-hammers operated by certain of said levers and arranged to cause the checker's sheet to receive impressions, independent printing-hammers operated by others of the said levers and arranged to cause the duplicate check to receive impressions, and a common printing-hammer in similar relation operated by the rest of the said levers, as set forth.

In testimony whereof I hereunto affix my signature in the presence of two subscribing witnesses.

OSCAR E. BRIGHAM.

Witnesses:

ADOLPH F. DINSE,

O. C. WINGE.