July 29, 1924. 1,503,375

O. W. PENDERGAST

PROCESS OF PRINTING CONSECUTIVE NUMBERS

Filed Aug. 17, 1921 3 Sheets-Sheet 1

Fig. 1.

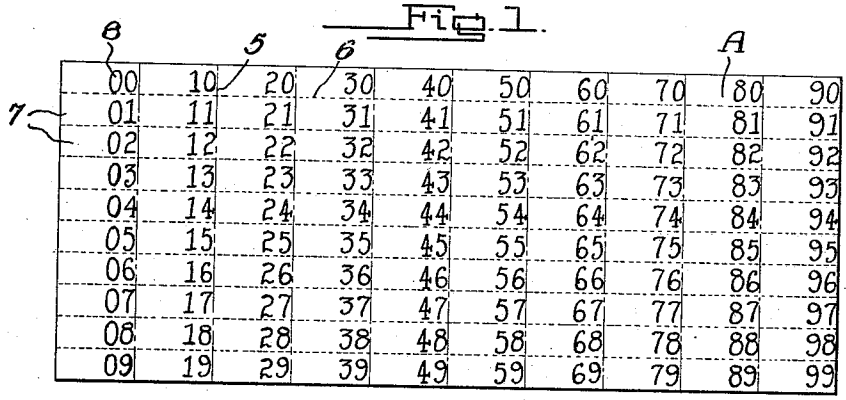
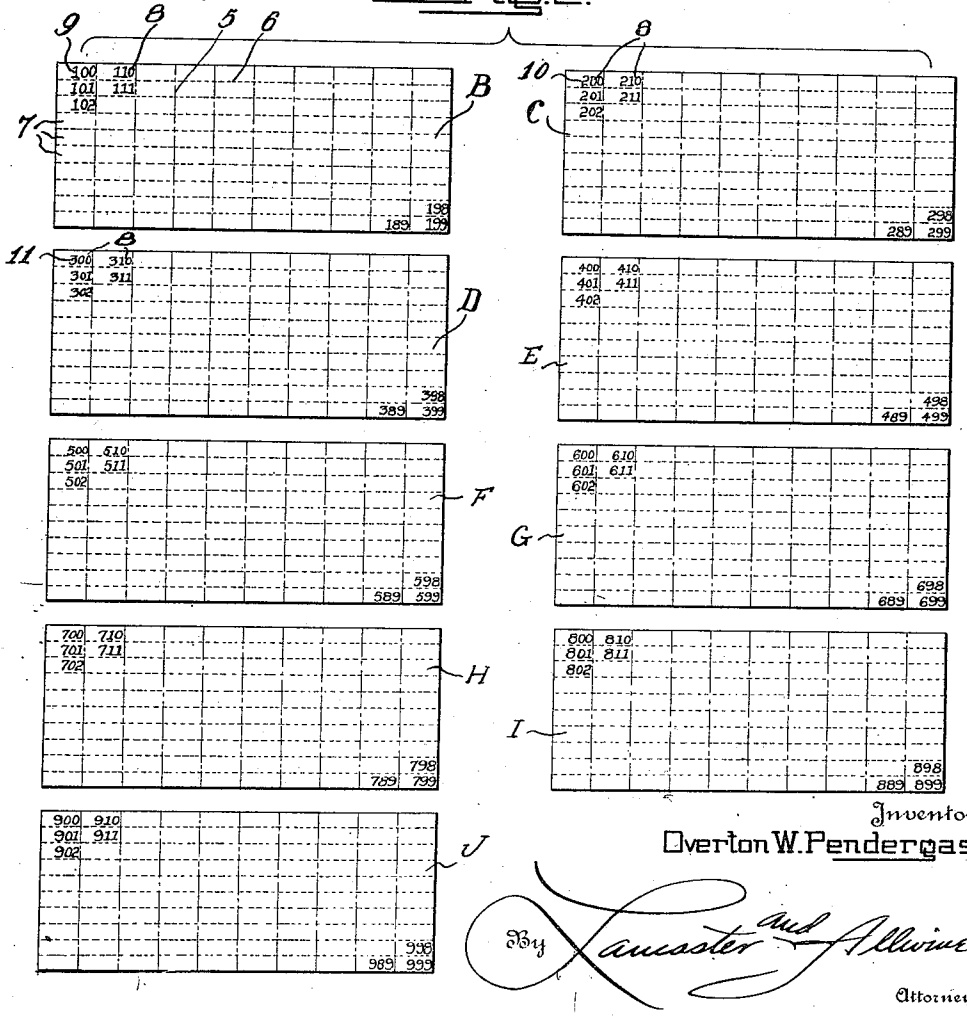


Fig. 2.



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PROCESS OF PRINTING CONSECUTIVE NUMBERS

Filed Aug. 17, 1921 3 Sheets-Sheet 2

Fig. 3.

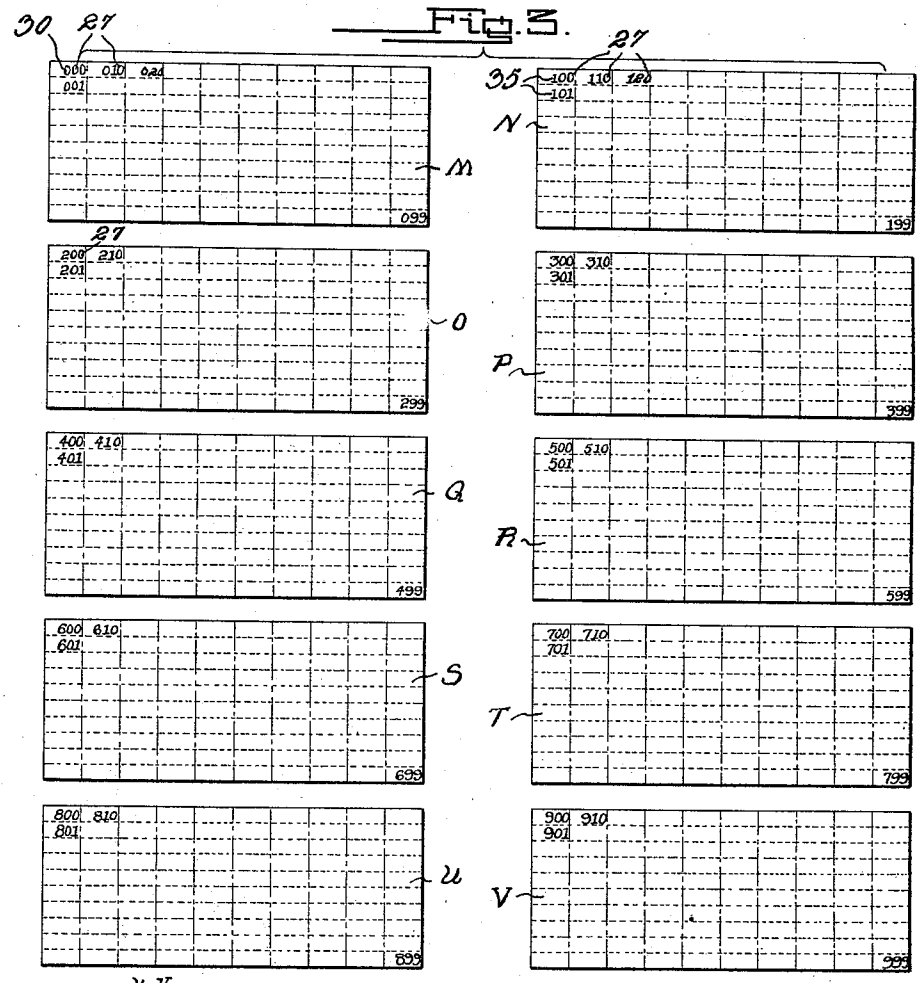


Fig. 4.

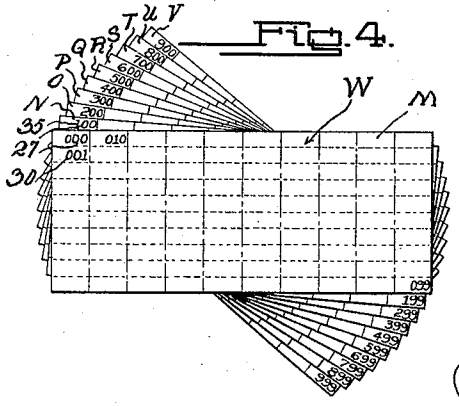
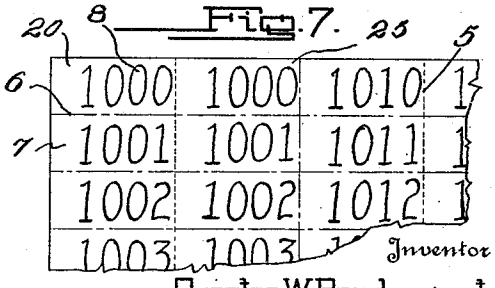


Fig. 7.



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PROCESS OF PRINTING CONSECUTIVE NUMBERS

Filed Aug. 17, 1921 3 Sheets-Sheet 3

Fig. 5.

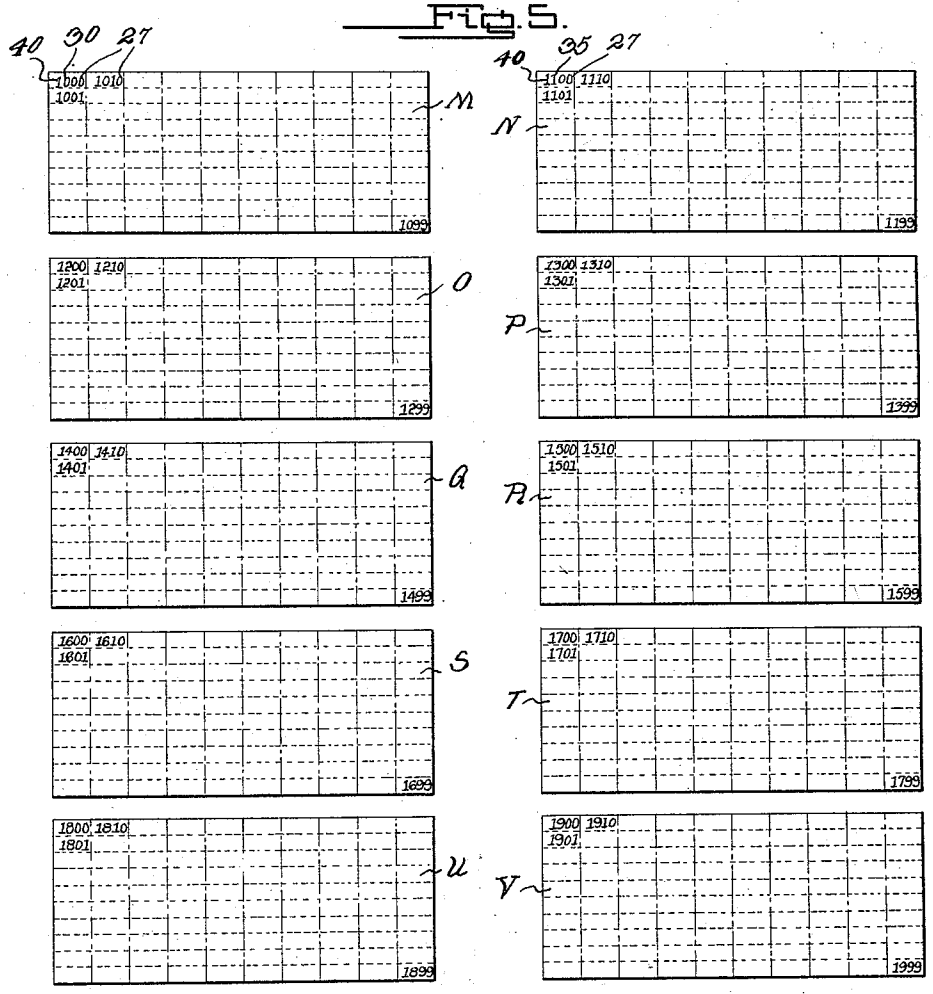
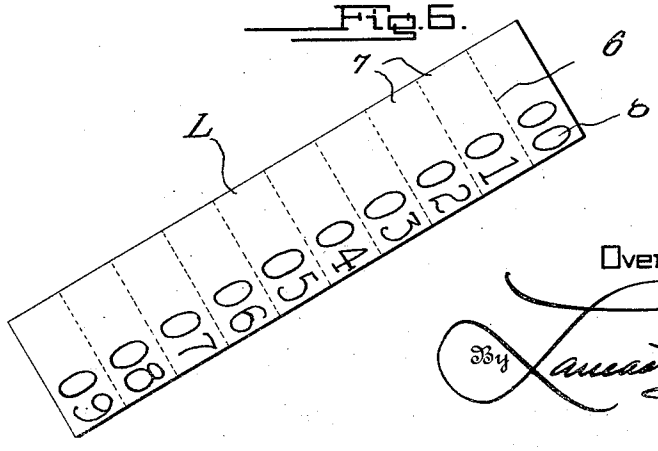


Fig. 6.



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Patented July 29, 1924. 1,503,375

UNITED STATES PATENT OFFICE.

OVERTON W. PENDERGAST, OF TERRE HAUTE, INDIANA.

PROCESS OF PRINTING CONSECUTIVE NUMBERS.

Application filed August 17, 1921. Serial No. 493,036.

To all whom it may concern:

Bt it known that I, OVERTON W. PENDERGAST, a citizen of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Processes of Printing Consecutive Numbers, of which the following is a specification.

This invention relates to the art of printing, and more particularly to a novel method of printing a plurality of consecutive numbers for use for any purpose, such as shipping tags, shop tags, job tags, tabs, slips or printed forms of any kind.

The automatic machines now on the market for printing numbers consecutively, cannot print in relatively large type owing to the mechanical construction thereof, and the cost of printing numbers consecutively on the ordinary type of printing press has been prohibitive, owing to the time and labor involved in setting up the different printing forms.

It is therefore a prime object of the invention to provide a novel method of printing numbers consecutively of any size, or on ordinary types of press in an expeditious and economical manner, so that the cards, tags, etc., being printed can be placed upon the market at a reasonable cost, thereby permitting the use thereof by the trade.

A further object of the invention is the provision of a novel means of printing consecutive numbers on tags or the like, consisting of taking a sheet containing a number of cards or tags to be printed, say one hundred, and setting a form in the press for printing the cards with numbers consecutively, starting with 00 and ending with 99, adjacent the inner ends of the cards, leaving spaces for other digits to be printed in front of the numbers previously printed, the sheets being then adapted to be run through the press again to allow the desired digits to be stamped in front of the numbers printed.

A further object of the invention is the provision of a novel method of handling the sheets printed with the numerals running from zero to 999 in order to permit cards having relatively high numbers to be economically, expeditiously printed thereon.

A still further object of the invention is the provision of a novel means for handling the sheets of cards tabs after being printed, and for cutting the sheets in order to facilitate the handling thereof, without necessitating the individual sorting of each card or tab to place the cards in their correct order.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed and illustrated in the accompanying drawings, forming a part of this specification, in which drawings:

Figure 1 is a plan view of one of the basic stock cards or sheets having the numerals printed on the tabs or tags contained in the sheet consecutively starting with 00 and ending with 99.

Figure 2 is a diagrammatic view of a series of the cards or sheets, showing the steps by which a series of stock cards can be made, having the numerals thereon running up to 999.

Figure 3 is a diagrammatic view of a series of the cards, showing a method pursued when the stock cards are to be printed with consecutive numerals running into the thousands.

Figure 4 is a detail view, showing a further step in the method of arranging one of the piles of the stock cards, when the same are to be printed with numerals running up into the thousands.

Figure 5 is a diagrammatic view showing one pack or series of the cards printed with the digit 1 in front of the numerals first printed, and forming a series of cards with the numerals starting with 1000 and ending with 1999.

Figure 6 is a detail view, showing one method of how the sheets of cards can be cut, in order to facilitate the handling thereof.

Figure 7 is an enlarged fragmentary plan view of one of the sheets of cards, showing the method of disposing the numerals on the cards and how the sheets of cards can be perforated, in order to permit the ready tearing of the cards apart when necessary or desirable.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts, the letter A indicates a basic stock sheet or card used in my method. This sheet is clearly shown in Figure 1 of the drawings, and is arranged to contain a series of 100 cards or tabs. It is preferable that the sheets be arranged to contain 100 of the cards or tabs, if the printing press is large enough to accommodate a sheet of this size, and if the press is not of

a size to accommodate a sheet as shown in Figure 1 of the drawings, the sheet can be divided into halves, fifths or tenths, as will be hereinafter more fully apparent. The sheet A is arranged to be perforated, or otherwise divided by a series of transverse lines 5 and by a series of perforated or otherwise formed longitudinal lines 6, which divide the sheets into the cards or tabs 7. These sheets A can be run through an ordinary perforating machine, in order to divide the sheet into cards or it could be run through the press with press perforating rows set in such a manner as to permit the tags to be readily separated from one another when the sheets will be cut into strips as shown in Figure 6 of the drawings, and which will be hereinafter more fully described. A form is then set up in the press, so as to print a number in each of the cards 7, starting with 00 and ending with 99, as clearly is shown in Figure 1 of the drawings. These numbers are designated by the numeral 8. It can be seen that these numbers are so disposed that other digits can be placed in front thereof so as to make cards of higher denominations, when desirable. Thus these numbers 8 are arranged relatively near the inner right hand sides of the cards. The numerals can be printed consecutively in transverse columns as shown in Figure 1 of the drawings, or consecutively in longitudinal rows. A card or sheet thus formed represents a stock sheet, and a number of these sheets are adapted to be carried on hand by the printer, and it is evident that a number of these sheets, so printed, can be run off at one time. It is evident that if the press is not large enough to print a sheet containing a hundred tags or tabs 7, the same can be cut in half as stated, and numerals printed thereon starting with 00 and ending with 49, and numerals printed on the other half starting with 50 and ending with 99. If the press is not large enough to accommodate half sheets, a sheet can be cut in fifths, one fifth starting with 00 and ending with 19, the other 20 to 39; the other 40 to 59; the other 60 to 79; the other 80 to 99.

It is now desirable that these basic stock sheets be so arranged that a series of the same can be formed and carried on hand, so that a number of the series can be printed at one time. The series are to contain sets of ten cards each, each card containing consecutive numerals running from 00 to 99 in the first set; from 100 to 199 in the second set designated by B in Figure 2 of the drawings; the third set designated by the letter C running from 200 to 299; the fourth set designated by the letter D running from 300 to 399; the fifth set designated by the letter E running from 400 to 499; the sixth set designated by the letter F running from 500 to 599; the seventh set designated by the letter G running from 600 to 699; the 8th set designated by the letter H running from 700 to 799, the 9th set designated by the letter I running from 800 to 899; and the tenth set designated by the letter J running from 900 to 999. A series of cards thus formed or numbered represent a series of stock cards, which would be held in stock at all times by a printer and printed on various shades and grades of paper in various manners so as to suit the individual desires of the different persons and different businesses. It is to be seen that the basic stock card designated by the letter A is made into the series B by having the press set with the digit 1, in order to print the digit 1 in front of the numerals designated by the numeral 8. This is clearly shown by the numeral 9 in the series B. To form the series C, the numeral 2 is set in a form of the press and a basic stock card A run through the press, in order that the digit 2 be printed in front of the numerals 8 as designated by the numeral 10. The series D is printed, by setting a form in the press, with the digit 3 so as to print the digit 3 as at 11, in front of each of the numerals 8 of the basic stock cards. This is continued in each of the sets E, F, G, H, I, and J, using a digit of higher denomination each time, in order to make the progressive series of cards.

With such a series of stock cards on hand, when a printer receives an order, say for a series of cards running into the thousands, he can easily fix other digits in front of the numerals of a series of cards A, B, C, D, E, F, G, H, I, and J, in order to form a series of cards with the numerals of higher denomination. It is desirable that the cards be cut into strips designated by the letter L in Figure 6 of the drawings, and these strips can be readily bound into a book if so desired, and each of the cards 7 are, as stated, divided by a row of perforations 6 and can be readily torn apart. If the cards are formed in strips L, it will be seen that one hundred different lot strips will be made, one lot containing cards numbered 0 to 9; another 10 to 19, and so on up to 990 to 999. By laying one strip off of each lot of the one hundred lots, a supply of strips will be had on hand, containing consecutive numbers 00 to 999.

If the tags or cards being produced, are to be in duplicate or in triplicate numbers on each tag or card, all it is necessary to do is to set two or three rows of the same numbers, one under the other, as designated by the numerals 20 and 25 in Figure 7 of the drawings, one under the other or one after the other, so that the duplicate or triplicate numbers will appear in the desired place on each tag or card.

Any other printing desired, can of course

be printed on either front or back of the tags or cards by running the strips through the press. The advantage of having the number of tags or forms in strips consecutively numbered when finished is important, as it enables one to keep them in rotation better and to pack and ship easier, and to make the forms up in serviceable tablet or books with a number to the book as stated. It also permits the same to be printed with other figures in front of the previously printed figures, with but one-tenth of the press work, which would be required if each numbers were on a separate piece, and it avoids the endless task of gathering up the numbers, but which is necessary if each tag or slip was separate from one another. As stated, this forms an important feature of the invention.

If an order is received for a number of cards or tabs printed consecutively, up to 10,000 the following method can be advantageously pursued. This method is shown in Figures 3 to 5 of the drawings and is along the same lines as the method previously described, but for clearness the steps from start to finish will be gone over.

First, one hundred sheets of stock paper or card board large enough to contain 100 of the tags or tabs printed, is out. Second, these sheets have printed thereon in numerical rotation numbers starting with 00 and ending with 99 as indicated by the numeral 27. Thus it can be seen that 100 of the stock sheets A will be formed. These numbers 27 should appear one under the other in columns of the numbers to form the tabs or tags, as shown in Figure 1 of the drawings. Third the hundred basic sheets thus printed, are divided into ten equal groups, of ten sheets each. Fourth, the digit 0 is printed in front of the number on each card or tab of one group of the ten sheets as at 30. Fifth, the digit 1 is printed in front of the number on each card or tab of the second group of ten sheets as at 35. This is continued printing 2, 3, 4, 5, 6, 7, 8, and 9 respectively, in front of each number on the third, fourth, fifth, sixth, seventh, eighth, ninth and tenth groups respectively. These groups are designated respectively by the letters M, N, O, P, Q, R, S, T, U, and V in Figure 3 of the drawings, and these correspond to the series of stock cards shown in Figure 2 of the drawings. Fifth, by gathering one sheet from each of these groups in proper rotation, a set of ten sheets will be had, containing one thousand cards or tags numbered from 000 to 999. This stack is laid aside, and another gathered like it, and this continued until a series of sets is thus formed. These sets are clearly shown in Figure 4 of the drawings, as designated by the letter W.

A digit 1 is printed in front of each number on each sheet of one set as at 40, and ten sheets or a set containing 1000 tags or cards numbering from 1000 to 1999 would be formed, as clearly shown in Figure 5. A second set is then taken, and the digit 2 is placed in front of each number, forming a second group of ten sheets containing 1000 tags or forms, numbering from 2000 to 2999. This performance is repeated, printing 3, 4, 5, 6, 7, 8, and 9 respectively, in front of each number of each stack gathered, and eventually sheets containing 10000 cards or tags numbered from 0000 to 9,999 will be formed.

The one hundred sheets are then laid in one stack in proper rotation, that is the sheet starting with the 000 on the top and continuing in numerical order down through the stack, and ending with the sheet containing 9,999 on the bottom. These sheets are then cut into strips and put together in proper rotation, so that the strips can be arranged in convenient form and in numerical order. These strips, as heretobefore stated, can then be bound into tabs or books as may be desired.

From the foregoing description, it can be seen that a novel method has been provided, for permitting cards to be centered, in an economical and expeditious manner, with consecutive numbers of any size type on an ordinary printing press.

Changes in details may be made without departing from the spirit or scope of this invention; but,

I claim:

1. Those steps in the method of printing numerals in succession on an ordinary printing press, consisting of taking a plurality of sheets containing a plurality of forms, printing consecutive digits in units on the forms, taking different groups of the sheets and prefixing digits of consecutive valuations on each group of sheets before the digits previously formed, whereby numerals on the sheets of consecutive valuation, starting from units and terminating in thousands will be formed.

2. Those steps in the method of printing numerals in succession on an ordinary printing press consisting of taking groups of sheets containing a plurality of forms having numerals printed thereon in consecutive rotation adjacent to the right hand portion thereof, said numerals on the groups or sheets starting with units and terminating at the thousands, prefixing the digits 1 in front of one group of the sheets, the digits 2 in front of the second group of the sheets, and continuously prefixing a digit of next successive valuation in front of each successive group or sheet to form numerals of consecutive valuation extending into the thousands.

3. Those steps in the method of printing numerals in succession on an ordinary print-

ing press consisting of taking a number of sheets containing a plurality of forms arranged in rows, printing successively in each form digits in units up to 100, then dividing the sheets into groups, prefixing the digit 0 in front of each numeral in each form of one group, then prefixing digits of successive valuation in each group in front of the numerals of each form thereof, then gathering a plurality of series of the sheets into groups arranging each group so that the numerals start with 000 on one sheet and terminate with 999 on the last sheet, then prefixing digits starting with 1 and increasing in valuation up to and including 9 in front of each successive group of sheets.

OVERTON W. PENDERGAST.