Instructions for Operating

the

STANDARD DESK ADDING MACHINE

"The Calcumeter"

THE BEST DESK ADDING MACHINE YOU CAN BUY AT ANY PRICE

ESTABLISHED JANUARY, 1903

HERBERT NORTH MORSE

Trenton, N. J. U. S. A.

[Form No. 8]

PRICE LIST

STANDARD DESK MODEL.

WITH RESETTING DIAL.

*6 dial,	9,999.99.....	$15.00
*7 "	99,999.99.....	20.00
*8 "	999,999.99.....	25.00
9 "	9,999,999.99.....	30.00
10 "	99,999,999.99.....	35.00
11 "	999,999,999.99.....	40.00
12 "	9,999,999,999.99.....	45.00

WITHOUT RESETTING DEVICE.

*5 dial,	999.99.....	$10.00

FRACTIONAL MODELS.

WITH RESETTING DIAL.

6 dial,	99,999¾.....	$15.00
7 "	999,999¾.....	20.00
8 "	9,999,999¾.....	25.00
6 "	99,999⅞.....	15.00
7 "	999,999⅞.....	20.00
8 "	9,999,999⅞.....	25.00

WITHOUT RESETTING DIAL.

6 dial,	99,999 11/12.....	$20.00
7 "	999,999 11/12.....	25.00
8 "	9,999,999 11/12.....	30.00
6 "	99,999 15/16.....	20.00
7 "	999,999 15/16.....	25.00
8 "	9,999,999 15/16.....	30.00
6 "	99,999 31/32.....	20.00
7 "	999,999 31/32.....	25.00
8 "	9,999,999 31/32.....	30.00

ARCHITECT MODELS.

WITHOUT RESETTING DIAL.

6 dial,	9,999 ft., 11 in. 11/12..	$20.00
7 "	99,999 ft., 11 in. 11/12..	25.00
8 "	999,999 ft., 11 in. 11/12..	30.00
6 "	9,999 ft., 11 in. 15/16..	20.00
7 "	99,999 ft., 11 in. 15/16..	25.00
8 "	999,999 ft., 11 in. 15/16..	30.00

Prices of other sizes and models on request.

* Stock machines.

Instructions for Operating the Calcumeter

You are using the Standard Desk Adding Machine (The Calcumeter) to secure the best results from your labors in your daily accounting; so as with the typewriter or any mechanical device you must master the correct operation to secure the great saving of time, labor, errors and brain strain that its use will bring to you. With this fact in mind, the following directions are given in full as an aid in mastering the correct and rapid operation of the machine.

The Calcumeter is being operated successfully in thousands of the best equipped and largest business offices throughout the world, and its use in your work will advance your service a hundred fold. Give it a thorough, conscientious test in your daily work and you will quickly realize its immense time, brain and error-saving ability. Remember that the machine is absolutely accurate in all of its working parts and will not show incorrect results. The construction is of such high-grade workmanship that it will endure constant use for an ordinary business lifetime without additional expense. Its size places the operating dials in so close contact with the figures that the dials and the figures are in the direct vision of the eyes, which entirely eliminates wrong registration. The separation of the figures around the dials eliminates eye-strain in rapid work. The machine is always ready for use upon the desk or books of the office and can be conveniently carried in your pocket.

ADDITION.

Hold the stylus between the thumb and forefinger in a natural position, and *in turning the dials be sure it is at right angles to the length of the machine.*

Hold the machine in the left hand, as a guide upon the figures to be added. This is the best method of using the machine, as the machine and the figures to be registered are in the same vision.

Each dial on the machine *corresponds to each column of figures;* therefore the figures in the units column are all registered on the first *right-hand* dial. The figures in the second column are all registered on the second dial. Those in the third column on the third dial, etc., etc.

Insert the stylus point firmly in the depression of the dial opposite the figure desired which appears on the face of the machine and turn the dial to the right with a firm oval movement, hitting the projection or stop squarely before removing the stylus from the depression. A few minutes' practice will secure the correct movement.

Register each figure of an amount on the proper dials and the register of the machine will show the total amount of the registration. Results appear in the open spaces (on the dial) at the left of each dial, between the 7 & 8 stamped on the face plate.

To clear the register of the machine to naught, place the stylus point to the bottom of the hole in the resetting dial. Hold stylus three inches from the face of the machine and turn in the direction of "the arrow" to the stop. Then turn back to starting point, and the dials are ready for a new registry.

Before attempting practical work, become familiar with the proper turning of the dials.

An accurate, easy-operating carrying device is located between each dial, so that units are carried to tens, tens to hundreds, hundreds to thousands, etc., automatically.

Register entire items as they appear upon the books, beginning with the proper dial at the left and proceed to the right. Do not add one column at a time.

Ciphers are not registered. When they appear in the items, pass the corresponding dial on the machine.

The Calcumeter is easier to operate and takes less time to master than any other adding machine, no matter what its cost.

EXAMPLE.

To add 729.15
36.25
9.38
500.50

Register the first item—72915.
Turn the 5th dial from 7 to the stop.
" " 4th " " 2 " " "
" " 3d " " 9 " " "
" " 2d " " 1 " " "
" " 1st " " 5 " " "
Register shows 729.15.

Register the second item—3625.
Turn the 4th dial from 3 to the stop.
" " 3d " " 6 " " "
" " 2d " " 2 " " "
" " 1st " " 5 " " "
Register shows 765.40.

Register the third item—938.
Register shows 774.78.

Register the fourth item—50050.
Turn the 5th dial from 5 to the stop.
" " 2d " " 5 " " "

Register shows the correct footing—1275.28.

When interrupted in the course of your addition, check between the last item added and the next item to be added. The work accomplished is not lost and will keep until the addition is resumed.

Confidence and accuracy in registering amounts upon the dials is best secured by at first using the machine to prove your mental additions. Continue this practice until you are sure that the amounts can be correctly registered, then all mental drudgery should be eliminated. After the correct operation is mastered you will find that one addition is sufficient to secure correct footings.

Speed in operation depends entirely upon the ability of the operator, in proportion to the amount of practice. The directions being followed, the average office man or woman can secure correct results on the machine in less time than by the mental process with the *entire elimination* of tiresome and erratic brain work. A conservative estimate (secured from actual tests) of the actual time saved by the use of the machine in the hands of skilled operators over expert mental addition is fifty per cent. per working day. Where sales-slips, checks or other scattered amounts are to be added, there is a saving of seventy-five per cent. per day. In the elimination of errors, one hundred per cent.

The Calcumeter is not sold in competition with the high-priced key machines, but you will find that

the Calcumeter answers all of your requirements more satisfactorily and at a great saving of money. I fully appreciate the desire of the average office accountant or bookkeeper to possess the use of an expensive and otherwise attractive adding machine, but before investing in so high a priced luxury, fully satisfy yourself that the Calcumeter cannot be made to answer your requirements as a time, brain and error-saving necessity.

The working parts of the Calcumeter are absolutely guaranteed against mechanical imperfections for three years from date of purchase. Should the machine fail to operate correctly, either from imperfections in construction or excessive use, within the said three years, it will be repaired free of cost to the purchaser.

I call your attention to this guarantee as a final warrant to the durable construction and lasting qualities of the Calcumeter. I absolutely guarantee the Calcumeter for three years, which is two years longer than any other manufacturer of reliable adding machines will guarantee their machines.

(In reference to the reliability of this guarantee refer to Dunn or Bradstreet for the honesty and standing of Mr. Morse, who has been manufacturing and selling these machines since January, 1903.)

SUBTRACTION.

Subtraction is performed by placing the minuend (larger number)

and the complement of the subtrahend (smaller number) on the machine; omit the figure 1 at the left and you have the difference between the two numbers. Thus:

Comp., 654.124
576.374—345.876=230.498
576.374
654.124

*1.230.498

*Omit the figure 1 at the left.

The complement of a number is the difference between that number and the next higher power of 10. Thus:

Comp.—	1	3	9	87	563	5600
No.—	9	7	1	13	437	4400
	10;	10;	10;	100;	1000;	10000

It is well for the novice to write the complement over the subtrahend before placing it on the machine. It takes but a few minutes' practice writing the complements to enable one to read numbers complementally almost as quickly as reading them naturally.

To write a number complementally, begin at the left of the number and write over each figure the difference between it and 9, except the last figure to the right *that is not a cipher;* over this figure write the difference between it and 10. All ciphers to the right of this figure must be written as ciphers. Thus.

Complement,	123.660	25.000
Number,	876.340	75.000
	1.000.000	100.000

When the subtrahend has a lesser number of figures than the minuend, the vacant places must be filled with ciphers, which are 9s complementally. Thus:

```
    Comp., 996.231
743.564—003.769=739.795
       743.564
Comp.,  996.231
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(Omit 1),  1.739.795
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MULTIPLICATION.

Multiplication is performed by registering the products of each figure of the multiplicand by each figure of the multiplier in the proper columns; the total product will appear in the register. This operation is very simple and will result in an immense saving of time.

The operation is simple if you bear in mind that the figures are registered on the dials of the machine in their relative positions to the figures in the columns if they were written on paper. When the results of the multiplication are registered, the result appears in the register of the machine.

[Ten, eleven and twelve-dial Calcumeters are manufactured especially for use in multiplication. Get used to using the machine for multiplication and the time saved over the pencil and paper method will astonish you.]

Never oil a Calcumeter.

EXAMPLE.

```
528
 36
---
 48
 12
 30
 24
  6
 15
---
19008
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Operation—$6 \times 8 = 48$; register the 4 on the second dial, the 8 on the first dial. $6 \times 2 = 12$; register the 1 on the third dial, the 2 on the second. $6 \times 5 = 30$; register the 3 on the fourth dial; the 0 is not registered. $3 \times 8 = 24$; register the 2 on the third dial, the 4 on the second dial. $2 \times 3 = 6$; register the 6 on the third dial. $3 \times 5 = 15$; register the 1 on the fifth dial, the 5 on the fourth dial. RESULT, 19008.

DIVISION.

Division is performed by the rule in the arithmetic, except that the complement of the divisor instead of the divisor is multiplied by the assumed quotient figure.

Place the dividend on the machine, leaving one place vacant at the left for the first figure of the quotient to appear. (Have the divisor and its complement on paper before you.) Consider the number of times the divisor is contained in the first partial dividend, multiply the complement of the divisor by this assumed quotient figure, and place the product in the columns occupied by the partial dividend, so that the unit figure of the product will be in the same column as the unit figure of the partial dividend, and the first figure of the quotient will appear at the left. The first remainder will appear in the columns first occupied by the partial dividend. If the remainder is larger than the divisor register the complement of the divisor once more, or until the remainder is less than the divisor. Annex the next figure of the dividend and proceed as before until all the figures of the dividend are used. The quotient will appear in the columns first occupied by the dividend, and the last remainder will appear in the columns of the last partial dividend.

Division is a little difficult to the novice, but after a few attempts becomes very simple and rapid.

EXAMPLE.

```
37 Complement.
63)24534
   111
  ----
  3563
   296
  ----
  8594
   333
  ----
   927
```

NOTE.

To get the complement, read the number thus:

Comp.,	6	5	7
Num.,	3	4	3
	9,	9,	10

The heavy figures are the quotient figures which appear successively in the register, and the 27 is the last remainder.

Square root, cube root, interest, discount and percentage can all be performed very rapidly after one gets familiar with the Calcumeter.

English Model Calcumeter

Register the pence on the pence dial, the shillings on the shillings dial and the pounds on the pounds dials, the same as explained for the addition of decimal numbers. The use of this machine for adding English money items results in a saving of fully seventy-five per cent. in time over the mental process, as pence are added into shillings and shillings into pounds by the simple registration of the items on the proper dials. *The machine, automatically, does the brain work.*

COST

The cost of the Standard Desk Adding Machine (The Calcumeter) is the lowest at which a thoroughly reliable and well-built machine, fully guaranteed, can be secured, and is insignificant compared with the money saved in the elimination of time lost in locating errors, elimination of brain work and its extreme handiness.

PRESERVE THIS BOOK FOR FUTURE REFERENCE