The object of this invention is an adding machine which may be carried in the pocket and can be used, for instance, for adding up during the day the caloric value of the various meals taken.

An example of this invention is shown in Fig.1. In Fig.1

1 and 2 are the two basic parts of a device which is constructed in the manner of those mechanical pencils which permit a graphite rod to be pushed out of the mechanical pencil and to be retracted into the mechanical pencil, by turning two parts of the mechanical pencil with respect to each other. The construction used in any of the mechanical pencils on the market which function in this manner can be used for the purpose's of this adding machine. In the adding machine shown in Fig.1, when the basic part 1 of the said device is turned clockwise (in the sense indicated by the arrow) with respect to the basic part 2 of the device, rod 3 is pushed within the basic part 1 downward, i.e. away from the basic part 2 and when the basic part 1 is turned counterclockwise with respect to the basic part 2, rod 3 retracts upward, i.e. it retracts towards the basic part 1

In addition to the device described above comprising a rod, and the two said basic parts, the adding machine shown in Fig.1 also comprises a part 4 which is concentric to the basic parts of the said device. In the position shown in Fig.1 this part 4 can be freely rotated with respect to the basic part 2 of the said device without engaging part 2. In the position shown in Fig.1 part 4 is pushed by the spring 5 upward, i.e. it is pushed away from the basic part 2 towards the basic part 1. This displacement caused by the spring action is limited by the shoulder 6 and the screw 7. When part 4 is pushed by hand downward so that it compresses the spring 5 then the rubber disc 9 which is fixed to part 4 will press against the sharp teeth of the disc 8 which is fixed to the basic part 1 of the device and therefore if part 4 is now turned with respect to basic part 2 it will engage part 1 of the device so that the rod 3 will be moved from part 1 toward part 2 or retracted from part 2 to part 1, depending on whether part 4 is turned clockwise as indicated by the arrow, or

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counterclockwise.

Part 10 is a transparent cap fixed to part 2 of the device (of which it may form a part) and has a hollow channel in which rod 3 can move forward and backward. Cap 10 carries a scale on which the position of rod 3 may be read at any time.

The top of part 4 is closed by a cap 11 so that the hollow part of part 4 can be utilized as a container. The bottom of this container is formed by a disc 12 to which the rubber disc 9 is attached.

In order to feed numbers into this adding machine, for instance numbers representing the caloric value of various dishes that have been consumed, one may proceed as follows: As shown in the blowup in Fig. la cap 10 which has a fixed position with respect to part 2 of the device carries a mark. On part 4 there is a circular scale the divisions of which are marked by numbers, for instance 0 to 9. In order to feed a number into the adding machine, say the number 2, part 4 is turned - while in the disengaged position shown in Fig.1 - until the division 2 on the circular scale on part 4 coincides with theemark on cap 10. Part 4 is then pushed downward by hand so that the spring 5 is compressed and the disc 9 of part 4 engages the disc 8 of part 1 of the device. In this engaged position part 4 is then turned in the direction of the arrow shown in Fig. la until the division 0 is lined up with the mark on cap 10.

This adding machine may be held in the pocket by means of a clip 13.

The container in the upper part of part 4 may be used for storing pills, for instance saccharine pills such as are used by those who have to keep their caloric intake low.

Fig. 1b shows a variant of the invention. According to this figure part 4 engages the basic part 1 of the device if the button 14 which is held in position by the spring 15 is pressed, This is just a different mean for making part 4 engage and not engage at will part 1 of the device.

Fig.2 shows another example of the invention. In Fig.2a

15 is one basic part and 16 the other basic part of the defice,

17 is a transparent body attached to the basic part 16. By turning

basic part 15 in the sense indicated by the arrow with respect to

basic part 16 the rod 18 is moved deeper and deeper within channel

19 in the transparent body 17 which is fixed to the basic part 16.

20 is a ring which can be turned against friction around the basic

part 16. It has a scale with divisions numbered 0 to 9.

In order to feed a number into the adding machine the ring
20 is turned around with respect to the basic part 16 until the mark
0 is lined up with the mark 0 carried by basic part 15 (as ibdicated
by the position shown in Fig. 2b). In order to feed in say the number
3, the basic part 15 is turned with respect to basic part 16 clockwise,
i.e.in the sense indicated by the arrow, until the mark 0 carried by
the basic part 15 lines up with the division 3 on the ring 20. In
this manner different numbers can be fed successively into the adding
machinemand the sum of these numbers can be read on the scale 21 carried
by the transparent body 17.

Fig. 3 shows a variant of the invention shown in Fig.2. The only difference between the two variants consists in the following:

The ring 22 shown in Fig.3 is supported by basic part15 rather than by basic part 16 and can be turned against friction against the basic part 15. In order to feed a number into the adding machine, say the number 9, the ring 22 is turned with respect to the basic part 15 until the division 9 on the scale carried by the ring 22 is lined up with the mark 0 carried by the basic part 16. Following this the basic part 15 is turned clockwise, i.e. in the sense indicated by the arrow, until the mark 0 on the ring 22 lines up with the mark 0 carried by the basic part 16.

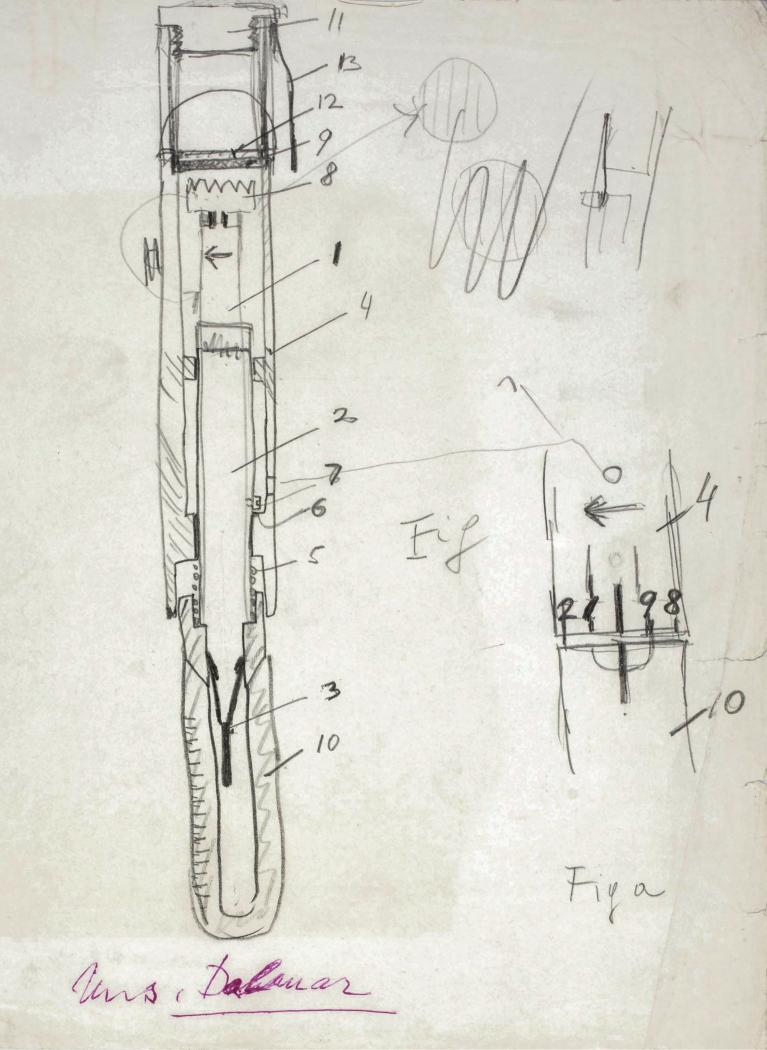
In the example shown in Fig.2 and in Fig.3 the positions of the circular scale and the mark can be interchanged in the sense that the circular scale could be on the basic part of the device and the mark could be on the ring.

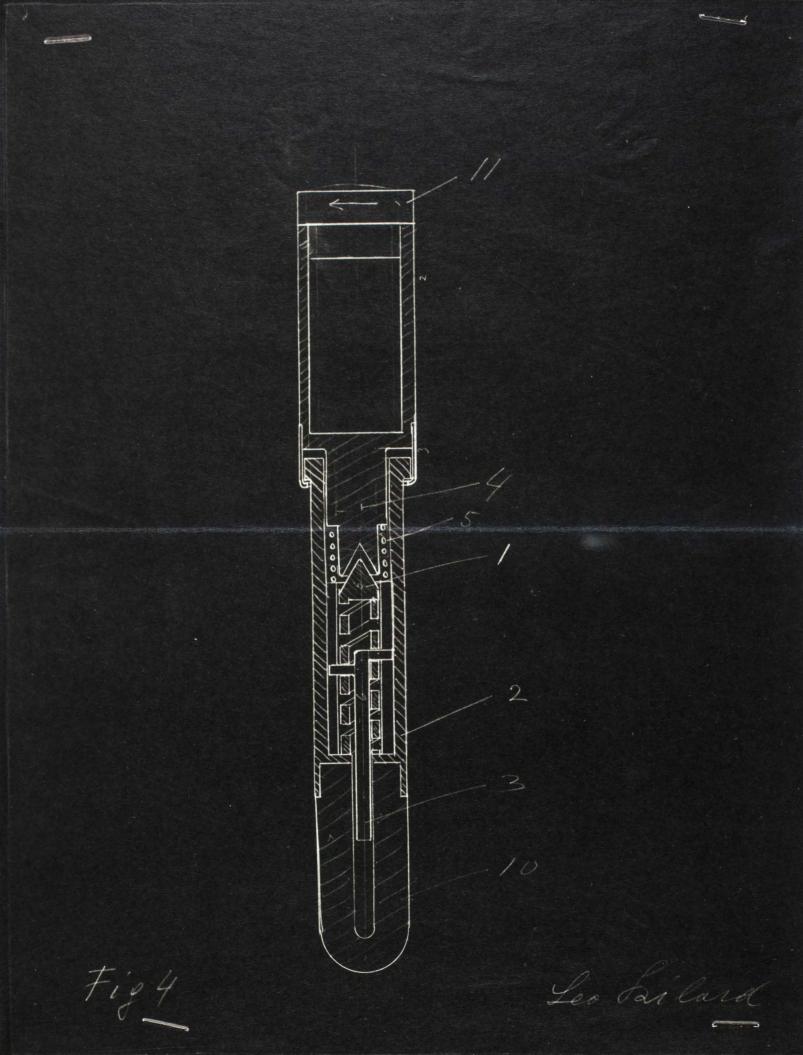
Fig. 4 shows a different construction of the adding machine shown in the Figures 1 and 1a. Fig. 4 is understandable on the basis of the description given of Figures 1 and 1a.

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CLAIMS:

- pencil the said device comprising a rod or strip and two basic parts which can be turned against each other causing the rod or strip to be pished within one of the basic parts away from the other basic part when the two basic parts are turned in one sense with respect to each other and to be retracted within the first mentioned basic part towards the other basic part when the two basic parts are turned in the opposite sense with respect to each other, the said adding machine further comprising a fourth part which may be turned with respect to one of the basic parts against friction without engaging the other basic part.
- 2. An adding machine comprising addevice built like a mechanical pencil the said device comprising a rod or strip and two basic parts which can be turned against each other causing the rod or strip to be pushed within one of the basic parts away from the other basic part when the two basic parts are turned in one sense with respect to each other and to be retracted within the first mentioned basic part towards the otherbasic part when the two basic parts are turned in the opposite sense with respect to each other, the said adding machine further comprising a fourth part which may be turned with respect to one of the basic parts against friction and means permitting at will to have the said fourth part engage or not engage the other basic part.





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