May 21, 1929. J. C. CRAWFORD 1,714,159

MEMORANDA DEVICE

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Fig. 1.

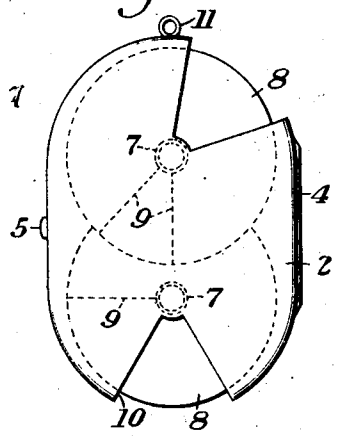


Fig. 2.

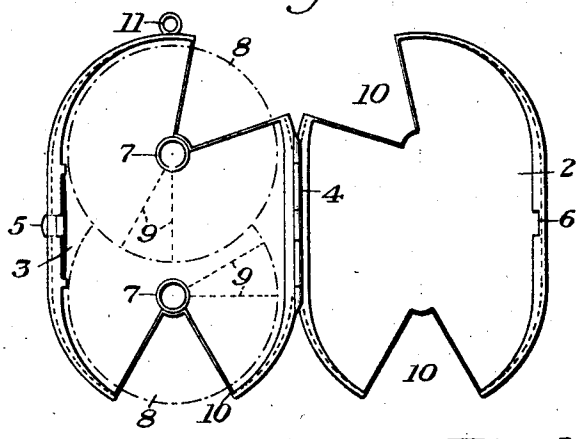


Fig. 3.

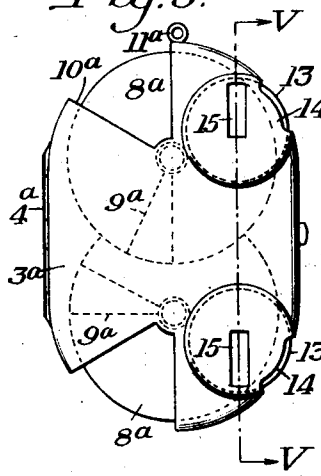


Fig. 4.

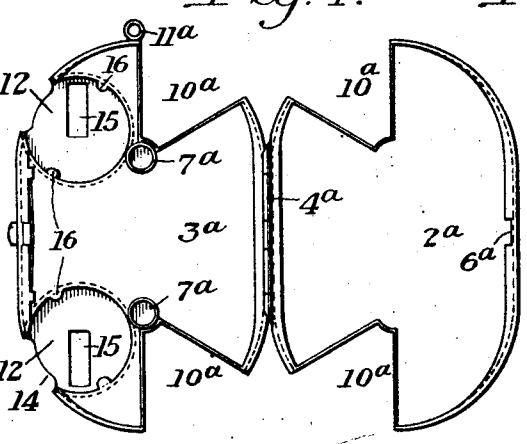


Fig. 5.

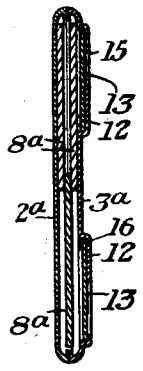
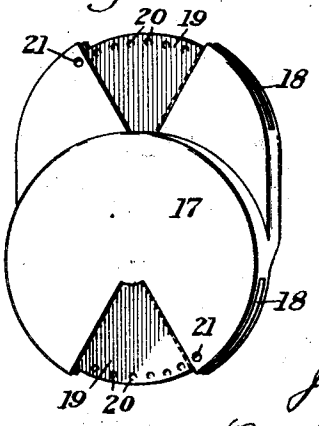


Fig. 6.



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MEMORANDA DEVICE

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Fig. 7.

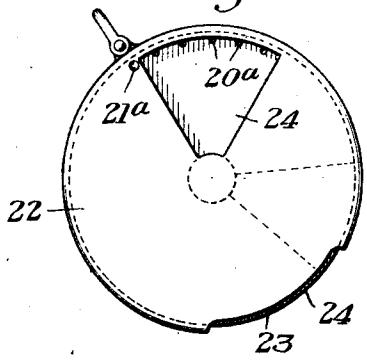


Fig. 8.

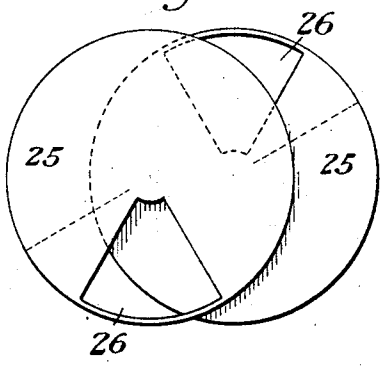


Fig. 9.

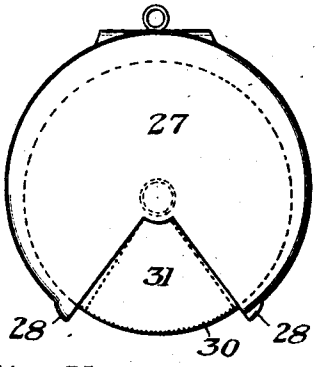


Fig. 10.

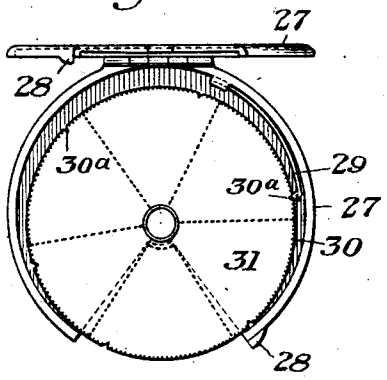


Fig. 11.

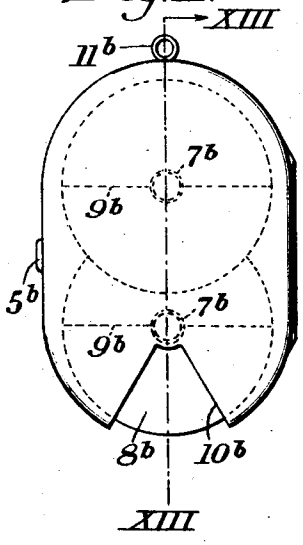


Fig. 12.

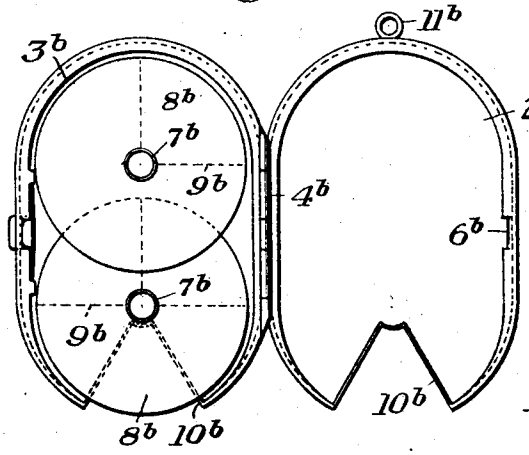
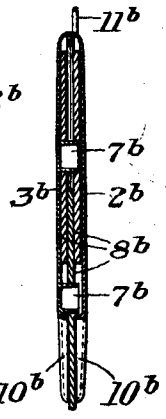


Fig. 13.



INVENTOR

Jesse Clare Crawford,

Byrnes, Stebbins, Bugen & Parmelee,

his Attys.

Patented May 21, 1929. 1,714,159

UNITED STATES PATENT OFFICE.

JESSE CLARE CRAWFORD, OF PITTSBURGH, PENNSYLVANIA.

MEMORANDA DEVICE.

Application filed March 11, 1922. Serial No. 543,100.

The present invention relates broadly to memoranda and reference devices for general information or notation, and more particularly to devices of this nature of compact construction whereby they may be conveniently carried in the pocket or held in the hand and adapted for use by public speakers, lecturers, teachers, entertainers, etc., or by commuters, advertising promoters and others requiring condensed information, schedules of events or convenient notation or reminder devices.

In my United States Patent No. 1,412,043 of April 11, 1922, there are illustrated several forms of devices of this general nature, certain of which are duplicated and claimed herein, together with modifications and improvements, whereby the present application constitutes a division in part and continuation in part of application Serial Number 496,127, which eventuated as said patent.

This invention contemplates improvements in devices of this general nature as heretofore provided, and embodies a plurality of advantageous features, facilitating operation and use of the indicia carrying or notation receiving member or members, together with novel means for holding said member or members.

In the accompanying drawings I have illustrated several forms of my invention for the purpose of giving a clear understanding thereof, but it will be apparent that various changes may be made in the design, construction and operation of the parts shown without departing from the spirit of my invention or scope of my broader claims.

In the drawings,—

Figure 1 is a side elevation illustrating one form of my invention;

Figure 2 is a view showing the construction illustrated in Figure 1 with the relatively movable members of the casing in open position;

Figures 3 and 4 are views corresponding to Figures 1 and 2, respectively, illustrating a slightly modified form of my invention;

Figure 5 is a sectional view on the line V—V of Figure 3;

Figure 6 is a perspective view of another form of my invention;

Figure 7 is a side elevation of still another form of memoranda device embodying the present invention;

Figure 8 is a side elevation showing one form of notation receiving or indicia carrying member;

Figures 9 and 10 are views corresponding to Figures 1 and 2, respectively, illustrating another embodiment of the invention;

Figures 11 and 12 are views corresponding to Figures 1 and 2, respectively, showing still another modified form of my invention;

Figure 13 is a sectional view on the line XIII—XIII of Figure 11.

I am aware that it has heretofore been proposed to construct various forms of pocket indicators or calculators comprising a rotatable indicia carrying or receiving member, but so far as I am aware such devices have never been provided with a readily removable and renewable member of this character, or with means cooperation therewith tending to hold the member in proper position or for indicating in the manner of the present invention the proper registry of the respective parts.

By the use of the present invention a speaker may deviate at will from a certain course without fear of omitting some important feature, and the strain induced where subject titles must be memorized, is eliminated. In like manner, it is adapted for use by any one requiring condensed, tabulated or scheduled information of various kinds on widely different subjects, or by any one desiring to make miscellaneous notations for future reference or consideration.

Referring more particularly to the drawings, there is illustrated in Figures 1 and 2 one form of my invention comprising a casing constituted by relatively movable members 2 and 3, which in the form shown are provided with a hinged connection 4. The member 3 may be provided with a spring operated catch 5 adapted to engage a suitably shaped detent 6 in the member 2, whereby the parts may be held in assembled relation. Each of the said members 2 and 3 have inwardly turned flanges or edges, as shown, around the greater portion of their perimeter, the flanged edges cooperating to hold the members in proper spaced relation, and also serving to partially enclose the casing. Projecting inwardly from the member 3 are hubs 7, adapted to have positioned thereover indicia carrying or receiving members such as disks 8. These disks may be each provided with one or more division lines 9 extending in any desired di-

rection thereof, for dividing the disks into a plurality of sectors or divisions. I preferably form the lines 9 under considerable pressure, whereby they lie below the main surface of the disks and are prevented from becoming rubbed or smeared in use. If desired, indelible ink may be advantageously used for this purpose.

Each member of the casing may be provided with one or more reading openings 10 formed therein in any desired manner and adapted to permit operation and inspection of the disks as well as access thereto. One of the casing members may be provided with an eye 11 of any desired construction, whereby the entire device may be carried on a chain or the like, if desired.

With the form of my invention described, the disks 8 carried on the respective hubs within the casing, may be so designed as to frictionally bear one against the other, whereby a too free rotation of the disks is prevented and they are held frictionally in the desired position.

In Figures 3 to 5 of the drawings there is illustrated a form of my invention corresponding generally to that shown in Figures 1 and 2 and for the sake of brevity I have indicated parts corresponding to the parts already described with the same reference characters having an "a" affixed thereto. In this form of the invention either one or both of the casing members may be provided with pockets 12 formed therein in any desired manner and at any desired position and adapted to receive supplemental disks 13 which may receive or carry any desired information. The disks 13 may be conveniently rotated by providing cutaway portions 14 in the member 3^a, as illustrated, and the pockets 12 may be provided with reading openings 15, permitting the desired access to the disks. In some instances it may be desirable to provide lugs 16 projecting inwardly a slight distance from the edges of the pockets necessitating springing the disks into position whereby they are prevented from becoming dislodged while the device is in use.

In Figure 5 one of the disks 8^a is illustrated as having a portion thereof extending between the disks on the other hub whereby the desired friction for preventing too free rotation of the disks is provided.

Figure 6 of the drawings illustrates a compound casing 17 having pockets formed therein, access to which is provided through peripherally extending slots 18. These pockets are adapted to receive disks 19 having a plurality of notches or depressions 20 formed therein and adapted to be engaged by a detent 21 whereby the disks are held frictionally in position and desired registration may be audibly indicated.

In Figure 7 the casing 22 is illustrated as having a cutaway portion 23 adapted to permit operation of the disk 24. This disk may be provided with notches or depressions 20^a corresponding with depressions 20 before described, and adapted to be frictionally engaged by a detent 21^a.

In Figure 8 I have shown a modified form of disk 25 as having an opening 26 extending therethrough. This construction is desirable where a plurality of disks are used in superimposed relation as the openings permit access to the sides of intermediate disks or to the inside surfaces of adjacent disks.

Figures 9 and 10 are illustrative of a form of my invention comprising hingedly connected casing members 27 provided with suitable clasps 28 for holding the same in assembled relation. One of the members may carry a yielding detent 29 adapted to cooperate with peripherally formed serrations 30 in the disk 31. This detent corresponds with the detents 21 and 21^a before described, and has the functional effect of the friction imparted by the use of additional disks as before set forth, whereby the disk may be held in any desired position. Deeper indentations 30^a may be so provided as to indicate the positioning of the sectors.

In Figures 11 to 13 there is shown a form of my invention corresponding to the forms shown in Figures 1 to 5, both inclusive, and for sake of conciseness the parts of this form of my invention corresponding to parts in those figures are indicated by the same reference characters having a "b" affixed thereto. In this form of the invention the casing members are each provided with a single reading opening 10^b, so that the disks 8^b carried by one of the hubs 7^b are kept in reserve. It will be noted from an inspection of Figure 13 that the disk being utilized may be frictionally held by the reserve disks.

It will be understood that any of the disk forms shown herein, together with other forms may be utilized with any of the casings as may be desired, as these disks may be made readily interchangeable. It will also be appreciated that the arrangement of frictional means for assisting in the holding of the disks in the desired position may be interchanged as found desirable.

The advantages of the present invention arise from the provision of a casing permitting easy operation and use of a disk or the expeditious insertion or removal thereof.

Further advantages arise from the provision of means for indicating the proper positioning of the disk or for frictionally engaging the same to prevent the too free rotation thereof.

I claim:

1. As an article of manufacture, a portable protective casing comprising directly inter-

engaging openable casing members at least one of which has a reading opening therein, at least one of the casing members having an enclosing flange around the greater portion of the edge thereof for cooperation with the other member and which also assists in holding the members in spaced relation, a disk rotatable in said casing and held in place by said members when in closed position, said disk having a plurality of indicia carrying sectors, and means for indicating the correct positioning of said sectors and said reading opening, said means engaging the disk without preventing rotation thereof, substantially as described.

2. As an article of manufacture, a portable protective casing comprising directly interengaging openable casing members at least one of which has a reading opening therein, and which have enclosing flanges extending partially around the edges thereof and which maintain the members in spaced relation, a disk rotatable in said casing and held in place by said members when in closed position, said disk having a plurality of indicia receiving sectors, and means for audibly indicating the correct positioning of said sectors and said reading opening, said means engaging the disk without preventing rotation thereof in either direction, substantially as described.

3. As an article of manufacture, a protective casing comprising hingedly connected casing members at least one of which has a reading opening therein, and which have cooperating edge portions partially enclosing the casing and maintaining the members in spaced relation, a disk rotatable in said casing and readily removable upon opening said members, and means frictionally engaging said disk without preventing rotation thereof for preventing too free rotation of the disk, substantially as described.

4. As an article of manufacture, a portable protective casing comprising a plurality of relatively movable members having a hinged connection at one side thereof, and having cooperating flanged edge portions which hold the members in spaced relation, each of said members having a reading opening extending from the center thereof entirely through one side opposite the hinged connection for said members, a trunnion carried by at least one of said members, and an indicia receiving disk rotatably supported on said trunnion, said disk being removable upon opening the casing, substantially as described.

5. As an article of manufacture, a portable protective casing comprised of two sections, a hinge connecting the sections to permit the casing to be opened and closed by movement of one section in a plane transverse to the plane of the other, a pivot carried by one of the sections, an indicia receiving disk between the sections on the pivot, said disk being removable upon opening the casing, at least one of said sections having an opening therein through which a portion of the periphery and a segment of the face of the disk are exposed, means for frictionally restraining the disk against free rotation, and means for releasably holding the sections together.

6. As an article of manufacture, a portable protective casing comprising two oppositely recessed sections having contacting flange portions, a hinge connecting the sections, a pivot carried by one of the sections in the recessed face thereof, an indicia receiving disk on the pivot in the space between the sections, said disk being removable upon opening of the casing, at least one of said sections having an opening therein through which a portion of the periphery and a segment of the face of the disk are exposed, means for frictionally restraining the disk against free rotation, and means for releasably holding the sections together.

In testimony whereof I have hereunto set my hand.

JESSE CLARE CRAWFORD.