

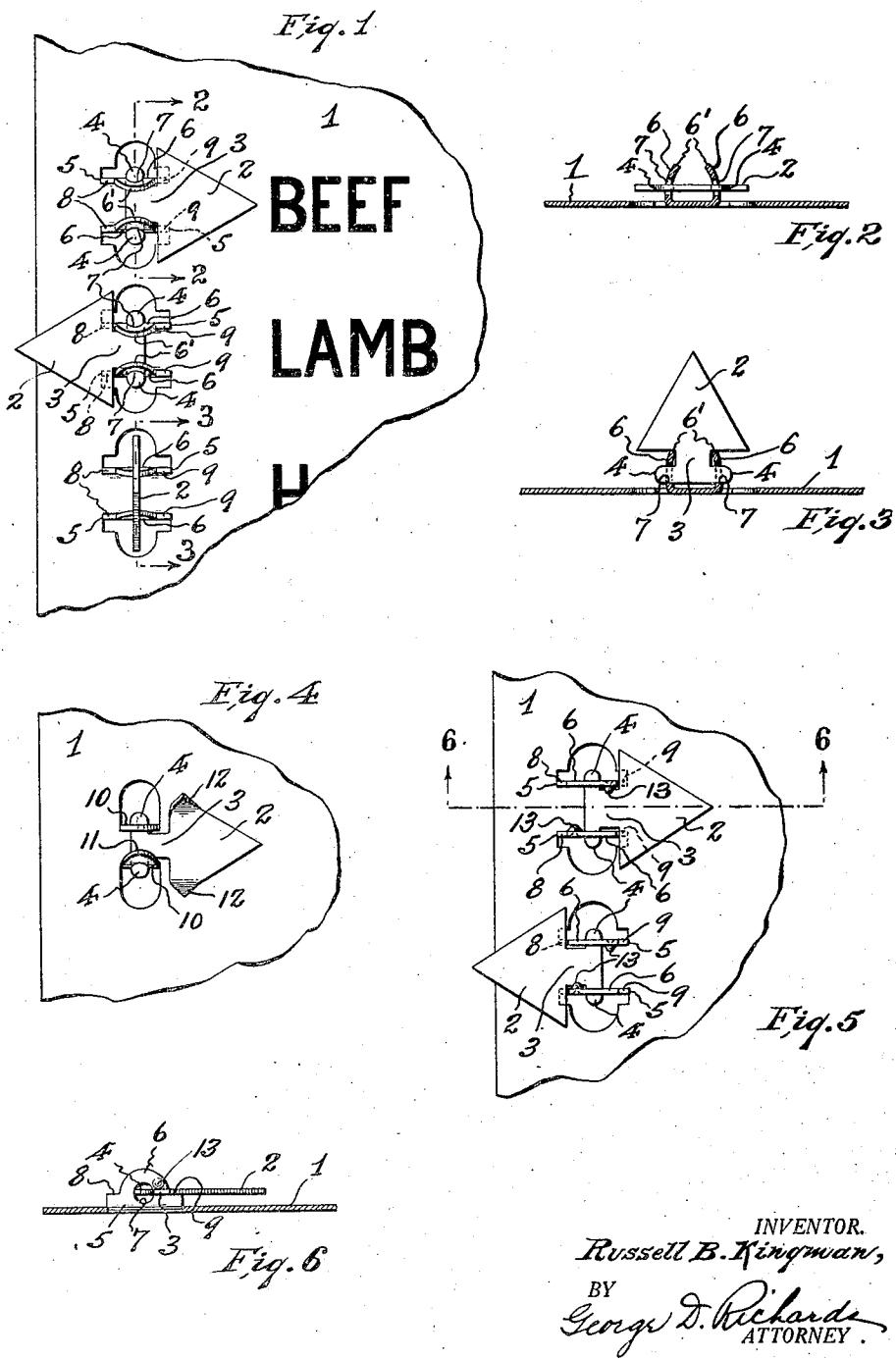
Sept. 4, 1928.

R. B. KINGMAN

1,683,358

INDICATOR FOR MEMORY CHECKING DEVICES

Filed May 27, 1927



INVENTOR.
Russell B. Kingman,
BY
George D. Richards
ATTORNEY.

Patented Sept. 4, 1928.

1,683,358

UNITED STATES PATENT OFFICE.

RUSSELL B. KINGMAN, OF ORANGE, NEW JERSEY, ASSIGNOR TO USEFUL PRODUCTS COMPANY, OF WEST ORANGE, NEW JERSEY, A CORPORATION OF NEW JERSEY.

INDICATOR FOR MEMORY-CHECKING DEVICES.

Application filed May 27, 1927. Serial No. 194,602.

This invention relates to improvements in indicator means or markers for use in connection with memory checking devices of the general type and kind shown in my 5 prior United States Letters Patent No. 1, 611,645, dated December 21st, 1926.

The present invention has for its principal object to provide an improved construction and arrangement of mounting for the 10 pivoted indicators or markers of memory-checking or reminder devices, the novel mounting being of such character that the said indicators or markers are yieldably retained against accidental displacement in 15 either indicating or non-indicating position, and so that they will not be displaced from selected position by jars, draughts of air or other uncontrolled causes.

The invention is clearly illustrated in the 20 accompanying drawings, in which:—

Figure 1 is a fragmentary face view of a memory-checking or reminder device provided with the novel means for pivotally mounting the indicators or markers thereof 25 made according to and embodying the principles of this invention; Figure 2 is a sectional view, taken on line 2—2 in Figure 1; and Figure 3 is another sectional view, taken on line 3—3 in Figure 1.

Figure 4 is a fragmentary face view of a modified form and arrangement of pivoted indicator or marker and mounting therefor which embodies, however, the principles 30 of the instant invention.

Figure 5 is a fragmentary face view of still another modified construction of mounting for pivoted indicators or markers within the scope of the instant invention; and Figure 6 is a sectional view, taken on 35 line 6—6 in said Figure 5.

Similar characters of reference are employed in all of the hereinabove described views, to indicate corresponding parts.

Referring now to the drawings, the reference character 1 indicates the body of the 45 memory-checking or reminder device. This body 1 is made of sheet metal. Suitably inscribed upon the face of said body 1 are the usual lists of names of articles or other items 50 of information which are subject to checking or indication by manipulation of movable markers; the latter being pivotally mounted in alignment with and to correspond to the said items of information, so that the same 55 may be turned to either indicating or non-

indicating relation to the items served thereby.

Each marker comprises a pointer member 2, preferably in the form of an arrow-head, having at its rearward end a shank-portion 3 60 terminating in a T-head serving to provide oppositely and laterally projecting journal tongues 4.

In the form of mounting for the markers which is illustrated in Figures 1 to 3 inclusive of the drawings, pairs of opposed and spaced apart lugs 5 are struck up preferably out of the metallic material of the body 1 at proper locations corresponding to the desired 65 positions of the markers. Integrally connected with the free ends of said lugs 5, intermediate the sides thereof, are bearing ears 6 having openings 7 to receive the journal tongues 4 of the markers, thereby forming 70 pivotal bearings for the latter. Said ears 6 75 are of reduced width relative to the width of the lugs 5 from which they extend, so that there are provided, beyond the junctions of the former with the latter, outer stop shoulders 8 and inner stop shoulders 9 which serve 80 to limit the movement of the markers, whereby, when the same occupy either non-indicating or indicating positions, the free ends of their pointer members 2 are outwardly 85 spaced from the underlying surface of the body 1, and are therefore held easily accessible by the finger of the user, so that they may be conveniently and quickly engaged and manipulated when it is desired to turn 90 the same from one position to another. The upper extremities 6' of said opposed ears 6 are inwardly bent or curved toward each other so as to define at their ends a space less than the width of the marker shank-portion 3. Owing to this arrangement, when the 95 marker is turned from non-indicating to indicating position or vice versa, the shank-portion 3 in passing between the inwardly bent extremities 6' of the ears 6 springs the same apart, but when the marker attains the 100 position to which it is thus moved, the inherent resiliency of the ears 6 causes the same to spring back to their normal inwardly inclined positions, consequently the marker is yieldably retained by the inwardly 105 bent extremities of said ears overlying the shank-portion, so that said marker is held against accidental displacement from either desired indicating or non-indicating position as the case may be. It will thus be obvious 110

that jars, draughts of wind or similar accidental occurrences are prevented from displacing the marker from either position to which it may have been moved, while nevertheless the same is easily subject to operative manipulation by the user.

In Figure 4 I have shown a somewhat modified form of mounting which is adapted however, within the scope of this invention, 10 to provide the desired means for retaining the marker against accidental displacement from a selected disposition of the same. In this form spaced and opposed perforate lugs or ears 10 are struck up out of the body 1, 15 and serve to journal the journal tongues 4 of the marker. An extremity 11 of the lower of said lugs or ears 10 is inwardly bent to overlie the shank-portion 3 of the marker to retain the same against accidental displacement, 20 while nevertheless permitting the marker to lift against gravity over the same during the passing movement of said shank-portion when the marker is turned from one position to another. In the latter construction as shown, and, if desired, in connection with the constructions illustrated in the other figures of the drawings, the stop-shoulders 8 and 9 may be omitted, and in place thereof the rearward lateral projections of the 25 pointer member 2 may be respectively turned up and down, as at 12 in Figure 4, to provide stops adapted to engage the body 1, and thus space the extremity of the pointer-member from the latter when the marker is in either 30 indicating or non-indicating position, whereby the same is easily accessible by the finger of the user when it is desired to manipulate the same.

In Figures 5 and 6 I have shown another 40 form of mounting adapted to function in yieldably holding the markers against accidental displacement from selected position. In this modified arrangement the general structure of the lugs 5, perforate ears 45 6—7, and stop-shoulders 8 and 9 is substantially the same as shown in Figure 1 and above described, except that the extremities of said ears 6 are not inwardly bent toward each other, but project upwardly in parallel vertical plane. One ear 6 is provided, however, in suitable position, at the side thereof toward the indicating position of the marker, with an inwardly projecting tit 13, past which the shank-portion 50 3 of the marker will spring, when the latter is moved to indicating position, so that said tit 13 will overlie the adjacent edge of the shank-portion so as to retain the same against accidental displacement from said indicating position. In like manner the 55 opposite ear 6 is provided at the side thereof toward the non-indicating position of the marker with a similar inwardly projecting tit 13' adapted to cooperate with the shank-portion of the marker in a similar manner

and for a similar purpose, when the latter is disposed in non-indicating position.

It will be obvious that various changes other than those specifically mentioned in the foregoing description may be made without departing from the scope of the instant invention as defined in the appended claims, and consequently the matter herein shown and described is to be considered as illustrative and not in a limiting sense.

Having thus described my present invention, I claim:—

1. In a memory-checking device having a metallic plate inscribed on its face with itemized information, pointer members adjacent to and corresponding to the respective items of information, said pointer members having at their rearward ends laterally and oppositely projecting journal tongues, perforate ears struck up out of said metallic plate to provide bearings for said journal tongues, yieldable means on said ears and cooperative with said pointer members adapted to retain the latter against accidental displacement from either indicating or non-indicating position, said pointers having a respective part extending therefrom adapted for stopping said pointer members in spaced relation to said plate when occupying either indicating or non-indicating position.

2. In a memory-checking device having a metallic plate inscribed on its face with itemized information, pointer members adjacent to and corresponding to the respective items of information, said pointer members having at their rearward ends laterally and oppositely projecting journal tongues, perforate ears struck up out of said metallic plate to provide bearings for said journal tongues, said ears having inwardly directed projections beneath which said pointer members may be disposed when occupying either indicating or non-indicating positions, said projections being adapted to yield, under the inherent resiliency of said ears, to the movements of said pointer members when the latter are manipulated to occupy one or the other of said indicating or non-indicating positions, and said pointer having parts extending therefrom respectively adapted to stop the same in spaced relation to said plate when occupying indicating or non-indicating positions.

3. In a memory-checking device having a metallic plate inscribed on its face with itemized information, pivoted pointer members adjacent to and corresponding to the respective items of information, each pointer member having at its rearward end a shank provided with oppositely and laterally projecting journal tongues, means integrally formed out of the body of said plate for pivotally mounting said pointer members, said means comprising pairs of outwardly

struck lugs, perforate ears integral with and extending from the ends of said lugs to receive the journal tongues of said pointer members, said ears being of less width than 5 said lugs whereby stop-shoulders are formed by the outlying extremities of said lugs adapted to engage said pointer members and hold the same spaced outwardly from the underlying surface of said plate, and at 10 least one of each pair of said ears having a

single inwardly bent yieldable upper extremity beneath which the shank of the associated pointer member may be disposed and whereby it is retained against accidental displacement from either indicating or non-indicating position. 15

In testimony, that I claim the invention set forth above I have hereunto set my hand this 26th day of May, 1927.

RUSSELL B. KINGMAN.