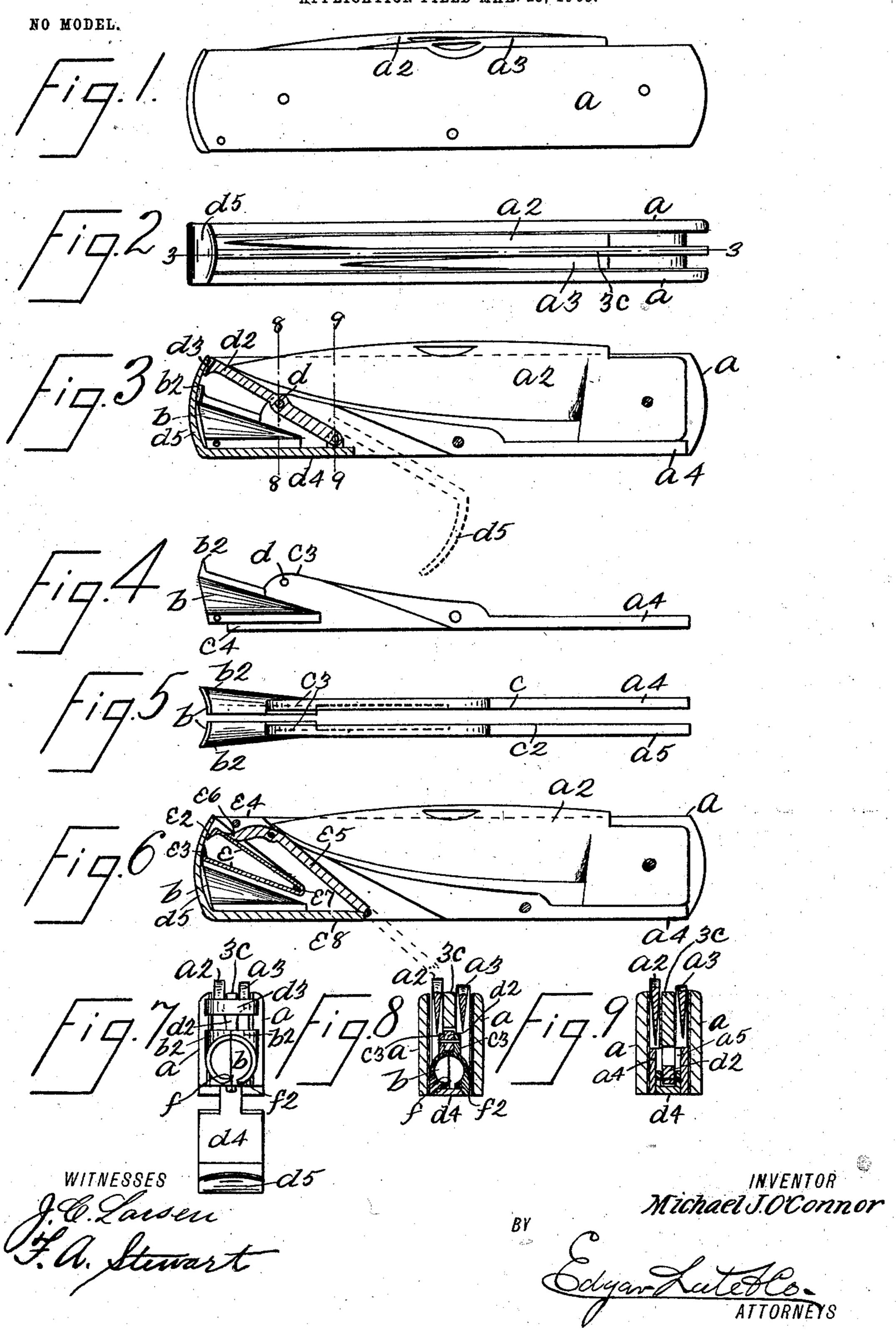
M. J. O'CONNOR.

POCKET KNIFE.

APPLICATION FILED MAR. 25, 1903.



UNITED STATES PATENT OFFICE.

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POCKET-KNIFE.

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To all whom it may concern:

Be it known that I, MICHAEL JOSEPH O'CONNOR, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Pocket-Knives, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide an improvement in pocket-knives wherein the same combines the usual cutting-blades, a nail-clip, and a pencil sharpener, each of which is independent of the other, a further object being to provide a combination pocket-knife of the class hereinafter described and claimed which is compact in form, simple in construction, and well adapted for the purpose intended.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a side view of my combination pocket-knife; Fig. 2, a top view thereof; Fig. 3, a section on the line 3 3 of Fig. 2 with the central plate of the handle thereof being removed; Fig. 4, a detail view of a back-spring which I employ, embodying a portion of the nail-clip and a portion of the pencil-sharpener; Fig. 5, a top view of two of said back-springs embodied in my invention: Fig. 6, a

springs embodied in my invention; Fig. 6, a view similar to Fig. 3 with one of the parts in a different position; Fig. 7, a left-hand end view of the device as shown in Fig. 3 with the parts in a different position or as shown in dotted lines in Fig. 3; Fig. 8, a section on the line 8 8 of Fig. 3; Fig. 9, a sec-

tion on the line 9 9 of Fig. 3.

In the drawings forming part of this specification I have shown at a the handle or side members of an ordinary pocket-knife provided with the usual cutting-blades a^2 and a^3 , provided with the usual back-springs a^4 and a^5 , which are similar to those usually employed at the ends, which operate with the cutting-blades a^2 and a^3 and the outer end of which are enlarged and provided each with a portion of a pencil-sharpener b, said pencil-

sharpener b consisting of a cone-shaped recess one-half of which is in each of said backsprings, as clearly shown in the drawings, and the tops of the recesses of each of the 55 back-springs a^4 and a^5 are provided with a segmental upwardly-directed cutting member b^2 , and these members b^2 operate as one of the blades of the nail-clip.

As shown in Fig. 5 of the drawings, the 60 back-springs a^4 and a^5 are cut away for the greater part of their length on their inner surfaces, as shown at c and c^2 , the object of which is to provide the space which is adapted to receive the central plate of the handle of 65 said knife, while the outer ends, forming the pencil-sharpener and nail-clip, are adapted to be joined closely, and each of said backsprings a^4 and a^5 is provided with an upwardly-directed member c^3 , which is also pro- 70 vided with a recess extending to about the central portion of each of said back-springs, as shown in dotted lines in Fig. 5 and in full lines in Figs. 3, 4, 6, and 9, and this recess is continued outwardly beneath the pencil- 75 sharpener portions b, as shown at c^4 , the reason for which will be hereinafter explained.

Pivotally secured at d is a lever d^2 , the outer end of which is provided with a downwardly-directed blade portion d^3 , correspond- 80 ing to the upwardly-directed blade b^2 on the cone-shaped member b, and the members b^2 and d^3 serve as the two blades for a nailclip, and the inner end of the lever d^2 is provided with a plate d^4 , pivotally connected 85 therewith and which extends outwardly along the bottom of said knife and is curved upwardly and around the pencil-sharpener band the nail-clip members b^2 and d^3 , as plainly shown at d^5 in Figs. 1, 2, 3, and 6, and serve 90 as a protection or cover therefor, and this upwardly-directed member d^5 may be curved so as to be sprung into the position shown in the aforesaid figures and be retained in this position by friction.

The lever d^2 operates in the recess shown at c^3 of each of the back-springs a^4 and a^5 , and the plate d^4 , secured thereto, is adapted to enter the outwardly-directed portion c^4 of these recesses to a point near the outer end 100 of said knife, beyond which point the plate d^4 is widened to cover the entire bottom of said

knife, and the widened portion is continued over the end of the knife or over the member

 d^5 of the plate d^4 .

In Fig. 6 of the drawings I have shown a 5 modification of the lever d^2 and the nail-clip members b^2 and d^3 wherein I provide a yokeshaped spring member e, which is provided at its outer ends with inwardly-directed blade members e^2 and e^3 , which serve as the nailro clip, and pivoted in an upwardly-directed member e^4 of each of the back-springs a^4 and a^5 is a lever e^5 , provided with a downwardlydirected member e^6 , which normally bears against the upper side of the yoke-shaped 15 spring member e, and said yoke-shaped spring member e is held in position by means of a pin e⁷ passing into and held by the upwardlydirected members e^4 of the back-springs a^4 and a^5 , and the lever e^5 is also provided at its 20 lower and inner end with a plate e^8 , which is hinged thereto and is similar in other respects to the plate d^4 and the upwardly-directed member d^5 thereof.

In Figs. 8 and 9 of the drawings it will be 25 seen that each of the blades a^2 and a^3 pass into the usual blade-recesses between the handle members α and the central plate 3°, and the said central plate 3° is cut away on its under side to give clearance room for the 30 movement of the lever d^2 , or in the construction shown in Fig. 6 the lever e^5 and the upwardly-directed members c^3 of the backsprings a^4 and a^5 and which serve as supports for the lever d^2 are clearly shown in 35 Fig. 8, and, as shown in Figs. 7 and 8, the lower edge of the recess b of the back-spring a^4 is turned inwardly and provided with a cutting edge, as shown at f, which serves as the pencil-sharpener, and the lower edge of 40 the recess b of the back-spring a^5 is cut away, as shown at f^2 , to allow the shavings of a pencil being sharpened therein to pass through and out of the pencil-sharpener b.

In operation, as will be readily understood, 45 when it is desired to employ the nail-clip or the pencil-sharpener the upwardly-directed member d^5 is withdrawn from the end of the knife, and if it is desired to use the nail-clip the said member d^5 is forced into the position 50 shown in dotted lines in Fig. 3 and pressure being brought to bear thereon gives great leverage for the nail-clip members or blades b^2 and d^3 , and when the nail-clip or pencil-sharpener has been used the member d^5 is forced 55 back into position, as shown in full lines in Fig. 5, and the knife may be returned to its case or the pocket. By means of this construction it will be seen that the ordinary cutting-blades a^2 and a^3 of the knife may be 60 used whenever desired without interfering

with the nail-clip or the pencil-sharpener, and

the said nail-clip and pencil-sharpener do not add materially to the weight or size of said knife and when the member d^5 is in position are entirely concealed from view, and 65 in this way my combination-knife is compact, serviceable, and neat in appearance, and although but one modification of the construction shown in Figs. 1 to 3, inclusive, is herein shown and described it will be apparent that 70 other modifications thereof may be made and the exact construction of the various parts herein shown and described may be departed from, as will be readily understood.

Having fully described my invention, what 75 I claim as new, and desire to secure by Letters

Patent, is—

1. A device of the class described, comprising a handle portion provided with two backsprings which are enlarged at one end and 80 provided in their adjacent faces with a conical recess at one side of which is a blade member, substantially as shown and described.

2. A device of the class described, comprising a handle portion provided in the back thereof with two springs enlarged at one end and provided with a conical recess in their adjacent faces at one side of which is a blade member, the enlarged portions of said springs poing provided at the end thereof with a transverse cutting edge, and a lever pivoted in said handle portion and one end of which projects in the direction of said cutting edge and is provided with a corresponding cutting 95 edge, substantially as shown and described.

3. A device of the class described, comprising a handle portion provided in the back thereof with two springs enlarged at one end and provided with a conical recess in their 100 adjacent faces at one side of which is a blade member, the enlarged portions of said springs being provided at the end thereof with a transverse cutting edge, and a lever pivoted in said handle portion and one end of which 105 * projects in the direction of said cutting edge and is provided with a corresponding cutting edge, said handle portion being also provided with a plate which is pivoted to said lever and provided with a member which incloses the 110 end of the handle portion and covers said recess and said cutting edges, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 23d day of March, 1903.

MICHAEL JOSEPH O'CONNOR.

Witnesses:

GUSTAV A. JOHENSEN, PETER BALDWIN.