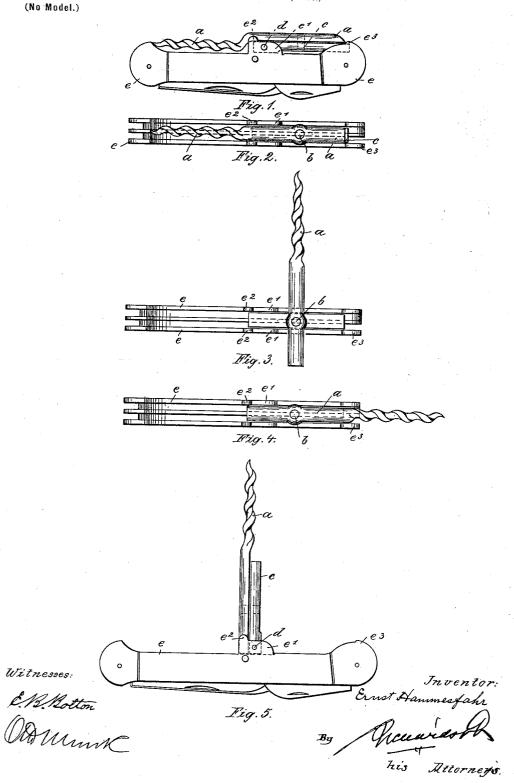
E. HAMMESFAHR. POCKET CORKSCREW.

(Application filed Dec. 29, 1897.)

(No Model.)

Witnesses:



UNITED STATES PATENT OFFICE.

ERNST HAMMESFAHR, OF FOCHE, GERMANY.

POCKET-CORKSCREW.

SPECIFICATION forming part of Letters Patent No. 610,530, dated September 13, 1898. Application filed December 29, 1897. Serial No. 664,300. (No model.)

To all whom it may concern:

Be it known that I, ERNST HAMMESFAHR, manufacturer, a subject of the King of Prussia, German Emperor, residing at Foche, near Solingen, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Pocket-Corkscrews, of which the following is a full description.

This invention relates to a pocket-corkscrew 10 in which the corkscrew proper can, in consequence of a peculiar arrangement, be made considerably larger and stronger than pocketcorkscrews of known construction. In addition the new pocket-corkscrew admits of be-15 ing very readily opened, while there is also the further advantage that when opened the corkscrew is held in a very secure manner.

One arrangement in which the new corkscrew is arranged on a pocket-knife or is com-20 bined with the same is illustrated in the drawings. Before proceeding to describe the details of this arrangement I shall first state generally, relatively to the peculiar features of the general construction, that in contra-25 distinction to the older corkscrews the corkscrew proper in this case is not mounted directly on the handle of the knife, but is connected therewith through the medium of a separate intermediate part. The corkscrew 30 proper is pivoted to the said intermediate part and the latter is pivoted to the handle, the hinges or pivots being so arranged that the movement of the intermediate part takes place in one plane of the handle and the 35 movement of the corkscrew proper on the in-termediate part takes place in a plane of the latter. In the arrangement shown the two axes of rotation are situated at ninety degrees to each other, and the corkscrew proper, 40 in passing from the closed position into the open position, assumes an intermediate position in which it is turned one hundred and eighty degrees from the closed position, as will be hereinafter more particularly de-

I now refer to the accompanying drawings, in which similar letters denote similar parts throughout the several views, and in which-

Figure 1 is a side view of a pocket-knife 50 provided with my improved corkscrew. Fig.

2 is a back view of said knife. Fig. 3 shows the corkscrew turned for ninety degrees. Fig. 4 shows the corkscrew turned for one hundred and eighty degrees; and Fig. 5 is a view similar to Fig. 1, the corkscrew being, how- 55

ever, in its proper working position.

In Figs. 1 to 5, a is the corkscrew proper, which is pivoted at b, Figs. 2 to 4, to the intermediate part c, Figs. 1, 3, and 5. This intermediate part is itself pivoted at d, Figs. 60 1 and 5, to the handle e, which is formed in the case shown by the shell of a pocket-knife. When the corkscrew shall be used, the screw proper, a, is turned upon or around its pivot \bar{b} , so as to assume the first intermediate posi- 65 tion (shown in Fig. 3) and then the second (Shown in Fig. 4.) intermediate position. When the corkscrew has reached this intermediate position, it moves, together with the intermediate part c, around the pivot d of the 70 latter, and thus the parts assume the position shown in Fig. 5. This operation is of course reversed in order to close the corkscrew.

In the arrangement shown the handle or shell e is provided approximately at its mid-75 dle with the projections e'. These projections hold the pivot-pin d of the intermediate part c. Not only the intermediate part c, but also the corresponding end of the corkscrew a, when the latter is in the open posi- 80 tion, engages between the two projections e', whereby, obviously, all rotation of the corkscrew about the pin b is prevented. Rotation of the parts a and c together about the pin d is prevented by the springs of the 85knife-blades. These springs are so mounted that in the center—that is to say, underneath the pivot-pin d—they are yielding, while they are placed in tension in the movement or passage of the intermediate part c from the 90 position of rest into the operative position, and vice versa. This tension of the springs, which is produced during the movement of the part c, acts most efficiently to prevent all improper movement of the said part c.

For the corkscrew a there are further arranged two stops $e^2 e^3$, of which one is operative when the corkscrew is in its position of rest, Figs. 1 and 2, whereas the other stop e8 holds the corkscrew fast in the position 100 Fig. 4, in which it is to be moved into the up-

right position.

Having now described my invention, what I desire to secure by Letters Patent of the 5 United States is—

In combination in a pocket-corkscrew, the handle, the intermediate part c pivoted thereto to stand at right angles to the handle and the corkscrew pivoted to the part c, said part c being in the form of a stem lying alongside

the stem of the corkscrew substantially as described.

In testimony whereof I have hereunto set my hand, at Barmen, Germany, this 14th day of December, 1897, in the presence of two 15 subscribing witnesses.

ERNST HAMMESFAHR.

Witnesses:

R. E. JAHN, OTTO KÖNIG.