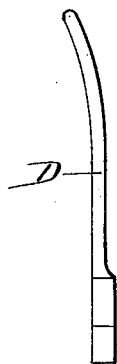
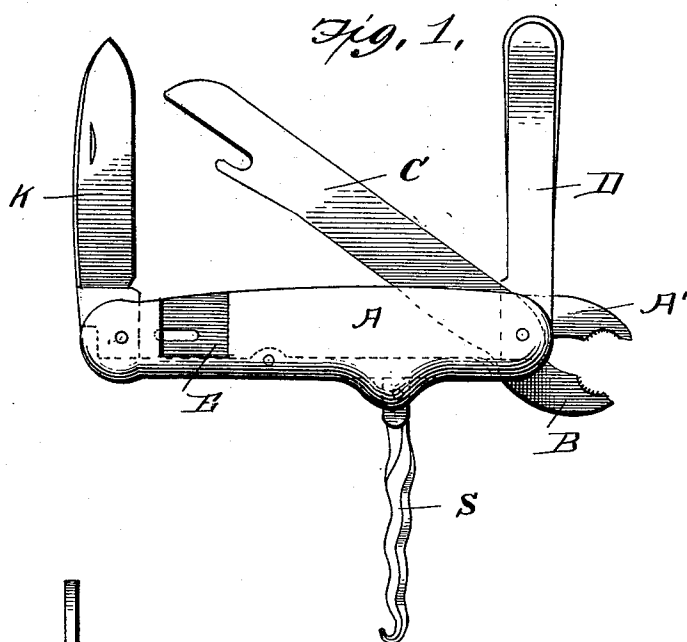


(No Model.)

J. R. WATTS.
POCKET KNIFE.

No. 596,096.

Patented Dec. 28, 1897.



WITNESSES

WITNESSES
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JOHN ROBERT WATTS, OF SHEFFIELD, ENGLAND.

POCKET-KNIFE.

SPECIFICATION forming part of Letters Patent No. 596,096, dated December 28, 1897.

Application filed April 28, 1897. Serial No. 634,242. (No model.)

To all whom it may concern:

Be it known that I, JOHN ROBERT WATTS, a subject of Her Britannic Majesty, residing at Sheffield, in the county of York, England, have invented certain new and useful Improvements in Pocket-Knives; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in pocket or spring knives of the class intended to serve a variety of useful purposes in emergencies; and the objects of my invention or improvements are, first, to provide an efficient tool or means for adjusting various parts of a cycle or like vehicle—such as air-valve fittings, nuts, spokes, or other minor parts; second, to afford suitable means for lifting pneumatic or other elastic tires out of the groove or rim of the wheels of road-vehicles, thereby obviating the necessity for carrying separate tools for these purposes, as is now usually the practice.

I will now explain my method of carrying my invention into practical effect, having reference to the drawings annexed hereunto, in which—

Figure 1 is a side view of the knife, having the several instruments partially opened out; Fig. 2, an edge view of the movable half of pliers; Fig. 3, also an edge view of the tire-lifter.

Similar letters refer to similar parts in the several views.

I make one end of one of the scales or sides A (usually forming the body of such a knife) of steel sufficiently strong to form one jaw A' of the pliers and long enough to project beyond the end of the knife proper, and inside of the knife I fit a corresponding jaw B, pivoted in the usual manner, having an extension C, which operates as a lever for applying the necessary gripping force by the operator's hand. The said lever part, when not required for use, lies within the body of the knife and is retained therein by means of a catch or equivalent device. The lever itself is fitted against a spring tending to keep the jaws of the pliers apart when catch is released. On the opposite side of the knife I insert a specially-shaped implement or blunt

blade D, the edges whereof are well rounded off to prevent injury when applied to a wheel for the purpose of detaching the elastic tire therefrom. This instrument I prefer to leave, when closed, with its curved end slightly projecting above the scale or body A of the knife through a side opening E, specially formed in that scale for the purpose of easy stowing and opening.

The knife proper may have any desired number of blades, such as K, corkscrew S, pricker, or other like appliances usually forming part of pocket or spring knives in addition to my improved pliers and tire-lifter.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A pocket-knife provided with a cutting-blade and a tire-lifter, the latter consisting of a flat blade rounded at the edges, and which is slightly bent to one side at the tip and adapted to fold behind one of the side plates or scales of the knife-body, the said plate or scale being provided with an opening to allow the protrusion of the said tip substantially as set forth.

2. In a pocket-knife, the combination of the knife-body having a plier-jaw fixed on one end thereof and a longitudinal slot in one of its side plates, with a stud or slide movable back and forward in the said slot and a lever pivoted to the said body and provided with a movable plier-jaw completing the pair of pliers, the said lever being also constructed with a part adapted to be engaged by the said stud or slide as it is moved forward in the said slot substantially as set forth.

3. In a pocket-knife, the combination of the knife-body, with a lever pivoted thereto, a catch adapted to lock and release the said lever at will and a spring acting on the said lever to open it, the said body and lever being pivoted respectively with the jaws of a pair of pliers arranged and operating substantially as set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

JOHN ROBERT WATTS.

Witnesses:

ISAAC BECK,
CHARLES HENRY BEDFORD.