

**A POCKET-KNIFE ARTIST.**  
BY DAY ALLEN WILLEY.

When we speak about whittling we generally think of one who sits on the barrel or cracker box and kills time by cutting shavings off a stick or putting a point on it—the crossroads store whittler we see in the play. There is a Philadelphia man who is a different sort of pocket-knife artist, for with the sharp blade of a simple jack-knife he turns out various things from imitations of tools to wooden jewelry. Ben Clay, as his neighbors call him, is a sort of neighborhood Santa Claus, besides being a wizard with the jack-knife. He calls the work whittling, but instead of turning wood into shavings he makes chains, pincers, and other objects which are highly prized by his friends, for the reason that he gives away a great many of them for Christmas and birthday presents. Consequently his friends and neighbors are well aware of his talent in this respect. In looking at some of

the chains which Mr. Clay has fashioned, it seems impossible that they could have been made out of a single piece of wood, but such is the fact. One can examine the links with a magnifying glass and see that they are all cut from the solid wood. There is not a crack or crevice or a place where the ends of the links have been glued together, yet the chains are as flexible as if finished by the goldsmith or the silversmith. This veteran whittler calls it an easy task to fashion a chain of single links. This anyone would think was made of parts first finished, then linked to each other, but not a link has ever been separated from its fellow. The knife blades shaped each from the block, after which it was smoothed down with sandpaper. Even the swivel at the end is from the same stick and was cut out while attached to the links without severing it from the link into which it fits. After Mr. Clay found he could make a watch chain of this pattern he tried his hand—or rather his knife blade—at what he calls a double-link chain—one in which two links arranged parallel to each other loop through two other parallel links, and so on. This was much more difficult, but he finished it without breaking a link. Then he attempted a quadruple chain—four parallel links looped through four others. In this case it was necessary to make some nice calculations to tell just how much wood would be needed for each set of four links, how much extra wood to leave where the ends of the links were to be cut out, for here the ends of one set of links would lap over the ends of the set into which they looped. It took a good many evenings before the "four linker" was finished, but it was finally completed without a break. This chain is Mr. Clay's most skillful whittled piece of work, although he has cut

out several "anchor chains" besides. Each section, instead of being merely an oblong ring, is hollowed out in the center and pierced through with four slits running lengthwise. The four parallel links thus formed are looped into the four adjoining links, and each link is as movable as if it formed part of a single-link chain. The anchor chains are likewise worked out of one piece, and not a pin, bit of wire, or other connection is used.

The chains vary from a foot to sometimes three feet in length. They are usually cut from sticks of black walnut. When Mr. Clay begins operations he first takes a stick of a suitable length. He shapes down the outside to the proper proportions with a plane so as to give a smooth surface. This, however, is the only tool used except the knife, and it really has nothing to do with fashioning the chain. He measures off the surface of the stick with a rule, marking the sizes of the links upon it. Then his knife

**New Photographic Shutter.**

In the exposure of a sensitive plate in the camera, under ordinary circumstances, it is impossible to get a correct timing for all the different parts of the plate, for the reason that such parts of the view which are more generously illuminated will be greatly over-exposed when the right timing has been given to the shadows. This is particularly true of landscapes, where it is desired to have the cloud effects as well as the proper definition of the various features of the composition. In order to overcome this disparity, it has been necessary to resort to the use of a ray filter, which was undesirable because it greatly prolonged the exposure, or to make use of a process known as "double printing." In the latter method the photographer makes two plates from the same viewpoint, one timed for the sky and the other for the foreground. Each is put through the various operations of development, and when it comes to making the print, the sensitized paper is exposed for the sky under one plate and for the foreground under the other plate. This work must be very neatly done, or the imposition will be detected.

After a long period of experimenting, a camera shutter has been devised by a well-known optical firm, by which it is possible to illuminate the plate properly, no matter what the conditions of light may be. As on the plate in the camera, the sky is reversed, and so at the bottom, the rays of light from the sky must enter at the top of the front lens and cross the rays of light from the foreground at the diaphragm point. It is a fact, therefore, that a shutter working before the lens which admits more light from the bottom than from the top will necessarily equalize the exposure. This is what is done by the new shutter. It has but one leaf or blade, which rises from the bottom, the speed

being regulated by an indicating device. No matter what the time of exposure may be, the sky will be given a very much shorter period than the foreground. Thus it is possible to give one part of the plate a second, while the other part will receive but one-eighth. This shutter is placed before the lens, and is supplied with an automatic clamping device, which makes it readily attached and detached. An ingenious regulating feature makes it available for all kinds of work, as well as for the purpose for which it was designed.

It is reported that the new swift steamer to be put into the New York service of the Compagnie Générale Transatlantique will be of 11,600 tons, and a speed of 23 knots, and will only carry two categories of passengers—first and third; she will be named the Chicago, and it is not yet decided whether or not she shall have turbine engines.

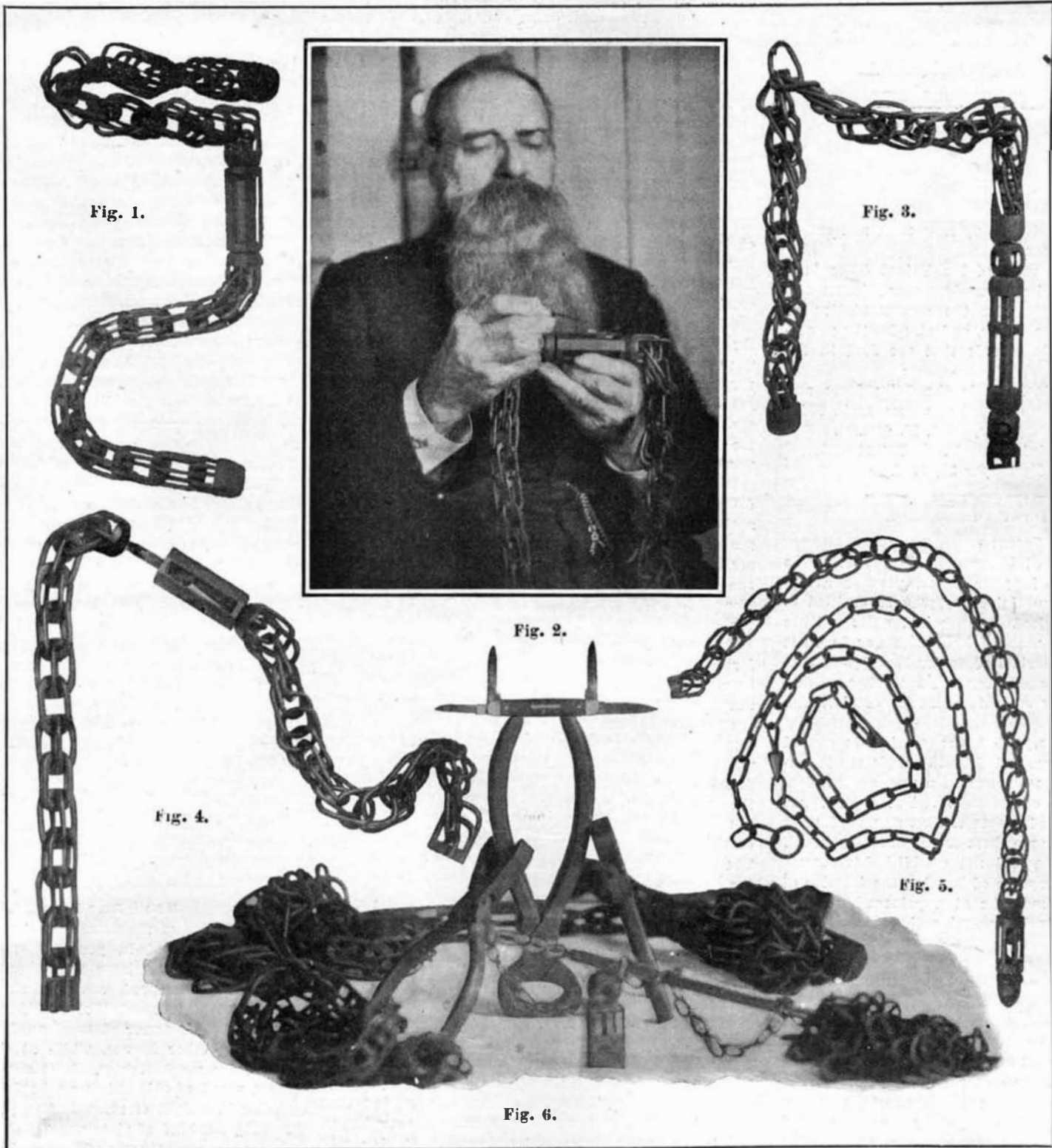


Fig. 1.—The section on the left is composed of links divided into six parts; the section on the right is made up of links of four parts. Fig. 2.—The whittler at work. Fig. 3.—Double link chain cut out of one piece. Fig. 4.—Chain made from one piece of wood. Fig. 5.—A single link and a double link chain. Fig. 6.—The jack-knife and its work.

**A POCKET-KNIFE ARTIST AND HIS WORK.**

blade goes into action, and the wood is formed into these intricate chains, into this curious jewelry, which as stated above, are as flexible as any chains made of metal, since each link is loose and plays into the one with which it is connected. After the rough work with the knife has been completed, Mr. Clay takes the sandpaper to remove the sharp edges which may remain.

As may be imagined, a straight eye and steady nerve are needed when the block is cut down to a point where the link ends are to be shaped, for a cut a quarter of an inch too deep or too much on one side may sever the chain. As a single-link chain requires some 75 hours to complete, an accident means the loss of considerable time. But seldom does the knife blade slip, and the pieces which are spoiled through such a mishap are few indeed considering the intricate designs.