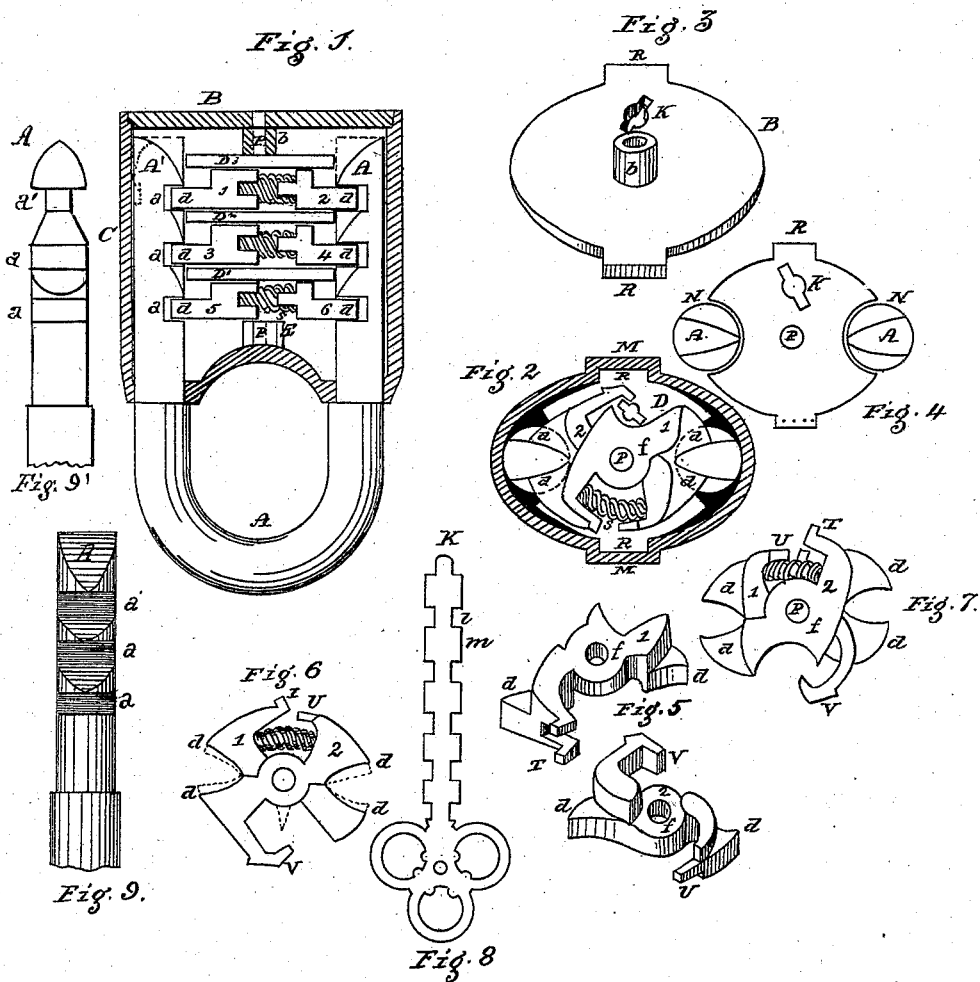


W. P. WIRTH & T. H. WICHERT.
Padlock.

No. 214,740.

Patented April 22, 1879.



WITNESSES.

INVENTORS.

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UNITED STATES PATENT OFFICE.

WILLIAM P. WIRTH AND THEODOR H. WICHERT, OF LANCASTER, PA.

IMPROVEMENT IN PADLOCKS.

Specification forming part of Letters Patent No. **214,740**, dated April 22, 1879; application filed March 11, 1879.

To all whom it may concern:

Be it known that we, WILLIAM P. WIRTH and THEODOR H. WICHERT, of the city of Lancaster, in State of Pennsylvania, have invented certain Improvements in Padlocks, of which the following is a specification.

This invention relates to a class of padlocks having a detachable notched hasp, which enters the shell or case and becomes locked, differing, however, in the construction of the gripe-pieces or cross-latches, there being two in three groups, separated by cross-plates, all held by a central pin extending from one end of the case to the other, as herein more fully set forth.

The accompanying drawings, with letters of reference marked thereon, and a brief description will enable those skilled in the art to make and use the same.

Figure 1 shows a vertical section of the lock and its interior arrangements in place. Fig. 2 shows a top view of the cross-latches, with the coiled spring, &c., in place. Fig. 3 shows the inner side of the cover, with its perforated central lug to hold the inner work in place and receive the one end of the central pivot. Fig. 4 shows one of the cross-plates to form the separate chambers. Figs. 5, 6, and 7 illustrate the cross-latches, upper and lower sides; Fig. 8, the key; Fig. 9, the inside face of one of the hasp legs or ends. Fig. 9' shows the one leg with the upper notch, *a'*, so as to lock at all points when inserted, and to retain it, to prevent being mislaid, while the other leg of the shackle is unlocked and turned to one side. It can only be detached by using the key, when both legs will lock, as herein set forth.

The latch or gripe pieces have the annular central portion, *f*, reversely bored out.

In Fig. 5 I show the gripes *d* at each end. One of the projecting flanges is bent out and slotted at *T*. The counterpart has a projecting tongue, *v*, so that it may enter the slot of its counterpart, and both jointly aid in confining a coiled spring, *s*, between them, so as to act upon both to keep the gripes or jaws *d* in the notches *a* in the shackle *A*, the gripes

or jaws being all brought on a common level opposite each other when said pieces are centrally on the pivotal pin *P*, and thus interlocked or crossed, as shown, Figs. 6 and 7. These pieces may vary some in the side notches or teeth; but they are substantially the same in each chamber of one pair crossing each other. The first pair (marked 5 6) rests directly on a circular boss, *E*, which is centrally perforated for the reception of the fulcrum-pin *P*, and also perforated on the side to receive the end of the key. This boss *E* is secured to the case on the inner side of the curve between the open nipples for the reception of the legs or ends of the shackle *A*. The second pair of latches, 3 4, comes between partitions *D*¹ and *D*², and the third pair, 1 2, between *D*² and *D*³.

The cover *B* sets into the case, its central cylindrical lug, *b*, binding down upon the upper partition, *D*³, and holding the fulcrum-pin *P*, extending through the center of the partitions and gripe-pieces or latches into the perforated boss *E*. When all is in position the top is beaten or brazed upon the shell and the lock is completed.

The key-holes must evidently be made on the one side of the covering-plate and partitions, the wards of the key and notches made to match, and act upon the latches between each pair to press them apart by their lever-projections, in order to withdraw the gripes *d* from the notches in the shackle, and thereby release it from the case or unlock it. To again lock it, it is only necessary to insert the limbs of the shackle into the case, the wedge portion of the intervening parts above the notches pushing the jaws out, and the springs forcing them back into the notches again, as in other cases of detachable shackles.

We use the horizontal partitions and three chambers, as shown in our application filed January 20, 1879; but the latches differ by each having a gripe or jaw at each end, only requiring one pair to each chamber, and a single pivotal pin centrally and common to each, and the key-hole on one side and a single spring to each pair, greatly simplifying

the construction and greatly reducing the cost of construction, and producing a safe, strong, and reliable padlock. Therefore,

What we desire to secure is—

The combination of the shackle A, spring S, and cross-latches provided with central annular openings *f*, gripes or jaws *d* at each end, and side projections T U V, arranged in three

separate sets or pairs, and held in place by a single central pivotal pin, P, substantially as and for the purpose specified.

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Witnesses:

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