G. PONGRACZ.

PADLOCK.

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1,270,205.

Patented June 18, 1918.

Fig. 1.

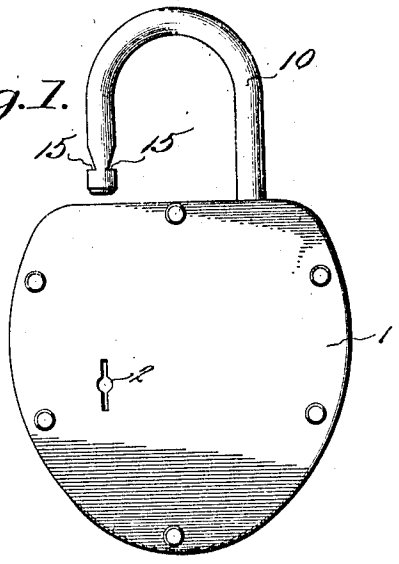


Fig. 2.

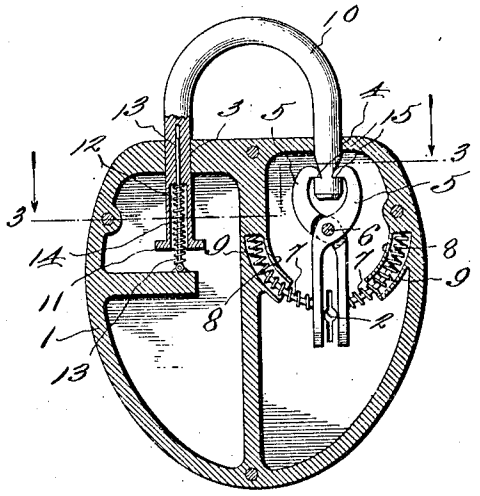


Fig. 3.

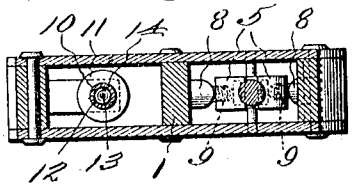
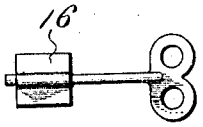


Fig. 4.



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PADLOCK.

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Application filed January 12, 1918. Serial No. 211,664.

To all whom it may concern:

Be it known that I, GYORGY PONGRACZ, a citizen of the United States, residing at Ohley, in the county of Kanawha and State of West Virginia, have invented new and useful Improvements in Padlocks, of which the following is a specification.

This invention relates to padlocks and it consists in the novel features hereinafter described and claimed.

An object of the invention is to provide a lock of simple and durable structure which may be used for all of the purposes intended for a pad lock and with this object in view the structure comprises a casing provided at one side with a key opening. A shackle is slidably mounted in the upper portion of the lock casing and one side of the shackle is permanently retained in the lock casing and may turn therein. A spring is located within the lock casing and bears against the longer side portion of the shackle and is under tension with a tendency to hold the shorter end of the shackle away from the lock casing. Gripper members are pivotally mounted in the lock casing upon a pivot common to both and both of these members are provided at their lower portions with outstanding curved pins around which coil springs are placed. Longitudinally curved tubes are located in the lock casing and receive the outer portions of the said pins. The lower portions of the said gripper members are located at the opposite sides of the key opening in the lock casing and consequently when a key is inserted through the said opening and turned it will swing the gripper members whereby their active or work engaging ends will disengage notches which are provided at the shorter end portion of the shackle of the lock.

In the accompanying drawing:—

Figure 1 is a side view of the lock.

Fig. 2 is a sectional view of the same.

Fig. 3 is a transverse sectional view of the same cut on the line 3—3 of Fig. 2.

Fig. 4 is a side view of a key which may be used in conjunction with the lock.

The lock comprises a casing 1 which is of conventional shape and which is provided at one side with a key opening 2. The casing 1 is provided at its top side with space openings 3 and 4 through which the side portions of a shackle (hereinafter described) may pass. Gripper members 5 are located within the casing 1 and pivotally mounted upon a pivot bolt which passes transversely through both of the said gripper members at a point between the ends thereof. The gripper members 5 are provided at their outer sides and in the vicinity of their lower ends with longitudinally curved pins 7. These pins are slidably received in longitudinally curved tubes 8 which are fixed with relation to the lock casing 1. The pins 7 and tubes 8 are curved on arcs which are struck from the center of the bolt 6. Springs 9 bear at their inner ends against the sides of the gripper members 1 and surround the pins 7 and are received in the tubes 8. The outer ends of the said springs bear against portions of the casing 1. The springs 9 are under tension with a tendency to hold the lower portions of the gripper members 5 toward each other and the lower portions of the said members are located at the opposite sides of the key opening 2 which is provided in the casing 1.

The lock also includes a shackle 10 one end of which is longer than the other and the long end portion of the said shackle passes through the opening 3 while the shorter end portion of the said shackle may pass through the opening 4. The longer end portion of the shackle 10 is slidably and turnably mounted in the opening 3 and the said portion is provided at its inner or lower extremities with an outstanding shoulder 11 adapted to limit the sliding movement of the shackle with relation to lock casing. The longer end portion of the shackle 10 is further provided with a socket 12 which receives a pin 13 mounted upon a portion of the casing 1. A spring 14 surrounds the pin 13 and enters the socket 12, one end of the said spring bearing against a portion of the casing 1 and the other end thereof bearing against the upper wall of the socket 12. The spring 14 is under tension with a tendency to normally hold the shoulder 11 in engagement with the inner surface of the tractor of the casing 1. The shackle 10 is provided at its upper end portion and at the opposite sides thereof with notches 15 which are adapted to receive the upper ends of the gripper members 5 when the shorter end portion is inserted through the opening 4 of the casing 1 and the extremity of the shorter end portion of the said shackle 10 is passed between the upper ends of the gripper members 5.

When the shackle 10 is in a closed posi-

tion with relation to the casing 1 and it is adapted to release the shackle, a key, as at 16 is inserted through the opening 2 and is turned whereby the wings of the key come in contact with the inner surfaces of the lower portions of the gripper members 5 and spread the same against the tension of the springs 9. Consequently the upper ends of the said gripper portions 5 disengage the notches 15 and the tension of the spring 14 comes into play whereby the shackle 10 is held longitudinally on the shorter end portion thereof and is carried out of and beyond the opening 4 of the casing 1. When the shackle 10 moves as hereinbefore indicated and the shoulder 11 comes in contact with the inner surface of the top wall of the casing 1 the outward movement of the said shackle is stopped but the shackle is free to be turned in either of two directions with relation to the casing 1. After withdrawing the key 16 from the key opening and when it is desired to close the shackle 10 and secure the same with relation to the casing 1 the shackle 10 is formed so that the several end portions thereof may be moved through the opening 4 of the casing. The said shackle 10 is then pressed in an inward direction against the tension of the spring 14 whereby the extremity of the shorter end of the shackle is forced between the upper or active ends of the gripper members 5 and when the notches 15 arrive opposite the extremities of the active ends of the gripper members 5 the springs 9 come into play and move the gripper members 5 whereby the active or working ends thereof are moved into the notches 15 and thus the shackle 10 is secured in a closed position with relation to the lock casing.

From the foregoing description taken in conjunction with the accompanying drawing it will be seen that a pad lock of simple and durable structure is provided, that a minimum number of parts are employed and that the arrangement is such as to permit of ready assemblage of the parts and after the parts have been assembled they are securely held in position with relation to each other.

Having described the invention what is claimed is:—

A lock comprising a casing having a key opening, a shackle movably mounted in the casing and having ends located in the paths of movement of the grippers and provided at the opposite sides of one end with notches, gripper members pivoted upon a single pivot and located within the casing and having end portions lying at the opposite sides of the key opening, curved pins mounted upon the gripper members, longitudinally curved tubes located in the casing, the curvature of the pins and the tubes being on arcs struck from the center of the pivot bolt of the gripper members and springs bearing at their inner ends against the gripper members and at their outer ends against the casing said springs surrounding the pins and having end portions housed within the tubes.

In testimony whereof I affix my signature.

GYORGY PONGRACZ.