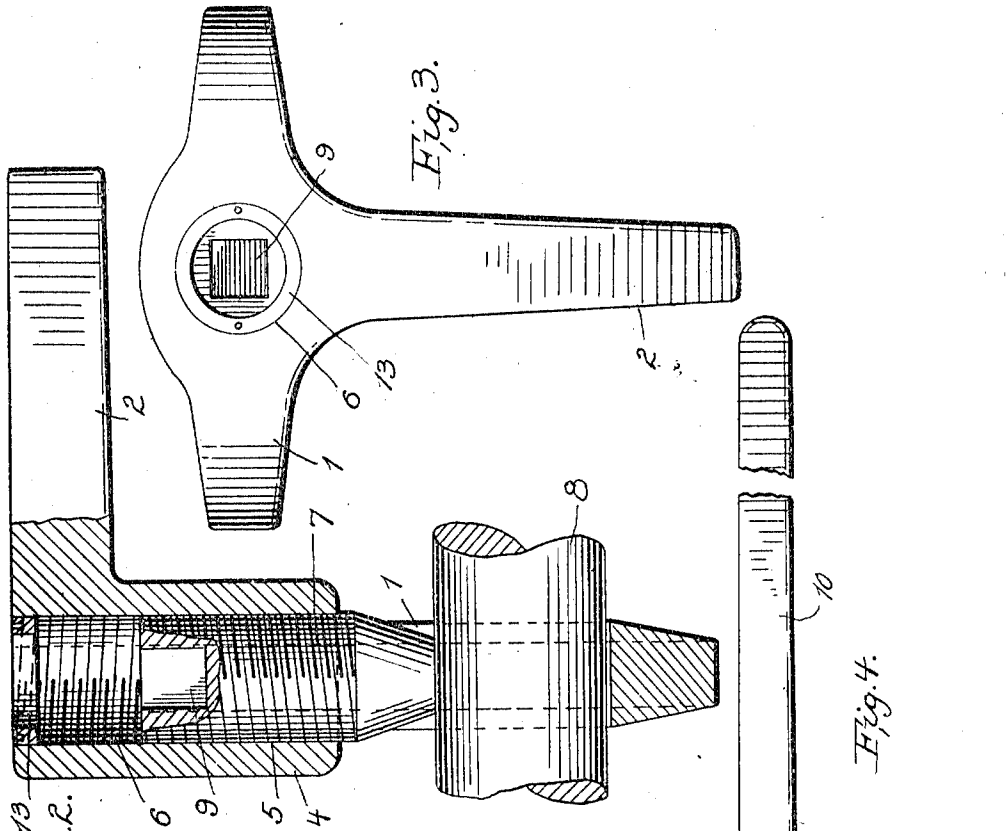
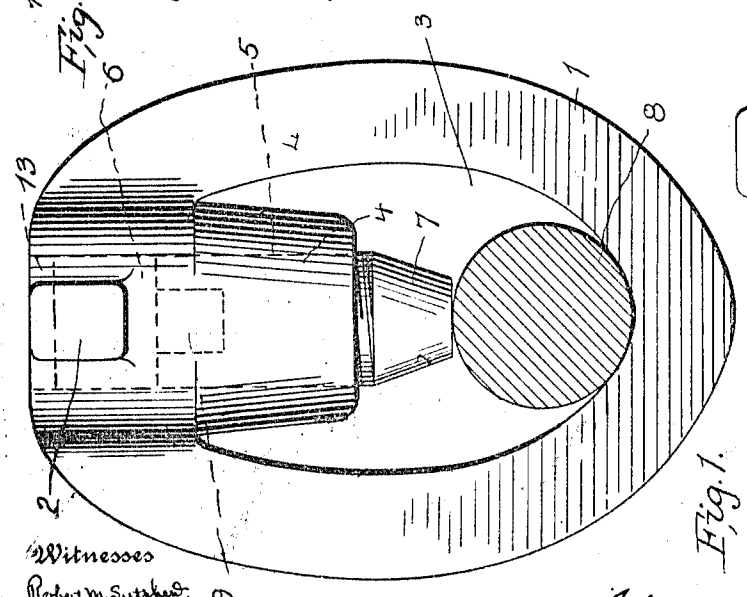
F. L. SCHULTZ & A. KANIESKI.

SAFETY LATHE DOG.

APPLICATION FILED DEC. 21, 1912.

1,066,760. Patented July 8, 1913.





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UNITED STATES PATENT OFFICE.

FRANK L. SCHULTZ AND ALEXANDER KANIESKI, OF HIBBING, MINNESOTA.

SAFETY LATHE-DOG.

1,066,760. Specification of Letters Patent. Patented July 8, 1913.

Application filed December 21, 1912. Serial No. 738,089.

To all whom it may concern:

Be it known that we, FRANK L. SCHULTZ and ALEXANDER KANIESKI, a citizen of the United States and a subject of the Czar of Russia, respectively, residing at Hibbing, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Safety Lathe-Dogs, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in adjustable safety dogs for lathes, and an object thereof is the provision of a device of this character in which the screw clamp for holding the object to be operated on in the lathe is completely inclosed in the dog.

A further object of the invention is the provision of a lathe dog which shall have no projecting portions which might catch in the clothing of an operator or strike his hand, thereby severely injuring him.

A still further object of this invention is the provision of an adjustable safety dog for lathes, the body portion of which is formed with an opening to receive the work to be operated on in the lathe, and the body portion being also formed with an inwardly projecting boss which is adapted to completely inclose the screw clamp for holding the object within the dog.

With these and other objects in view, our invention consists in the novel constructions, combinations, and arrangements of parts to be hereinafter more fully described, claimed, and illustrated in the accompanying drawing, in which—

Figure 1 is a rear elevation of our device; Fig. 2 is a side elevation thereof partly in section; Fig. 3 is a top plan view, and Fig. 4 is an elevation of the tool for adjusting the clamping screw.

Referring more particularly to the drawing, the numeral 1 designates the body of the lathe dog, which is provided at one end with a shank or handle 2 which is adapted to fit into the lathe clutch (not shown). The dog is formed with an elongated opening 3 which is adapted to receive the object to be operated on in the lathe, and formed on the dog at a point diametrically opposite the arm 2 is an inwardly extending boss 4 which is formed with a central threaded opening 5, the opening registering with a threaded opening 6 in the body of the lathe dog which is of the same diameter as the opening in the boss. The screw clamp 7 is adapted to hold the object to be operated on, designated in the drawing by the numeral 8, and is of substantially the same length as the combined length of the openings 5 and 6, so that when the clamp is not in use, it may be completely inclosed within the dog so that it will not project from the dog and be liable to catch in the clothing of the operator. The outer end of the screw clamp is formed with a centrally disposed angular recess 9, which is adapted to receive a wrench or key, whereby the screw may be adjusted to different sizes of work.

In Fig. 4 of the drawing, we have illustrated a key which is especially adaptable for use in connection with our lathe dog to operate the screw clamp thereof, consisting of a handle or shank 10, the key being formed with a head 11 which is provided with a reduced angular extension 12 for engagement in the angular opening 9 in the screw clamp. The circular head 11 is of a slightly less diameter than the diameter of the openings 5 and 6, so that the head may be inserted in the openings without coming into contact with the threads thereof and mutilating them. To facilitate the insertion of the extension of the key in the recess 9, a bushing ring 13 is disposed in the outer end of the opening 6 in the dog, the ring being rigidly secured therein but at the same time being readily detachable from the dog. It will be seen that the ring 13 will guide the head 11 centrally in the opening 6 so that the extension 12 will readily engage in the recess 9 when it is desired to adjust the screw clamp. The ring 13 will also form a stop to limit the outward movement of the screw clamp 7 and thereby prevent the operator from accidentally adjusting the clamp so that the end thereof will project beyond the edge of the dog.

It will be seen from the above description, taken in connection with the accompanying drawing, that it is unnecessary to provide a shield on the face or edge of the dog to protect said screw of the clamp, as the screw is completely inclosed in the dog beyond all possible reach except with the key. The device thereby forms a simple smooth piece, so that there is no possiblity of the clothes being caught by the dog, and moreover, there are no outstanding parts that can be

broken off thereby leaving rough points or surfaces which will be liable to catch the clothes or cut the operator.

Having thus fully described our invention, what we desire to claim and secure by Letters Patent is:—

1. A lathe dog comprising a body having an opening for the work, an arm secured to one end of the body for securing the dog in the lathe, an inwardly extending boss formed on the body, said boss having an opening therein and the body having a threaded opening therein registering with the opening in said boss, a screw clamp disposed in said openings, and a collar detachably secured in the second opening in the body to limit the outward movement of said screw clamp, substantially as and for the purpose described.

2. A lathe dog comprising a body having an opening for the work, an arm secured to one end of the body for securing the dog in the lathe, an inwardly extending boss formed on the body, said boss having a threaded opening therein, the body having a threaded opening therein registering with the opening in said boss, a screw clamp disposed in said registering openings and adapted to be entirely inclosed therein, said clamp having a recess in one end, and a collar detachably secured in the registering opening in the body to limit the outward movement of said screw clamp, the opening in the collar being of a suitable width to guide a tool into the recess in said screw clamp whereby the same may be adjusted, as and for the purpose described.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

FRANK L. SCHULTZ.
ALEXANDER KANIESKI.

Witnesses:
SOPHIA KANIESKI,
F. A. WILDES.