Feb. 16, 1926. 1,573,146

G. DREESE

SHIELD

Filed Feb. 9, 1924

Fig. 1

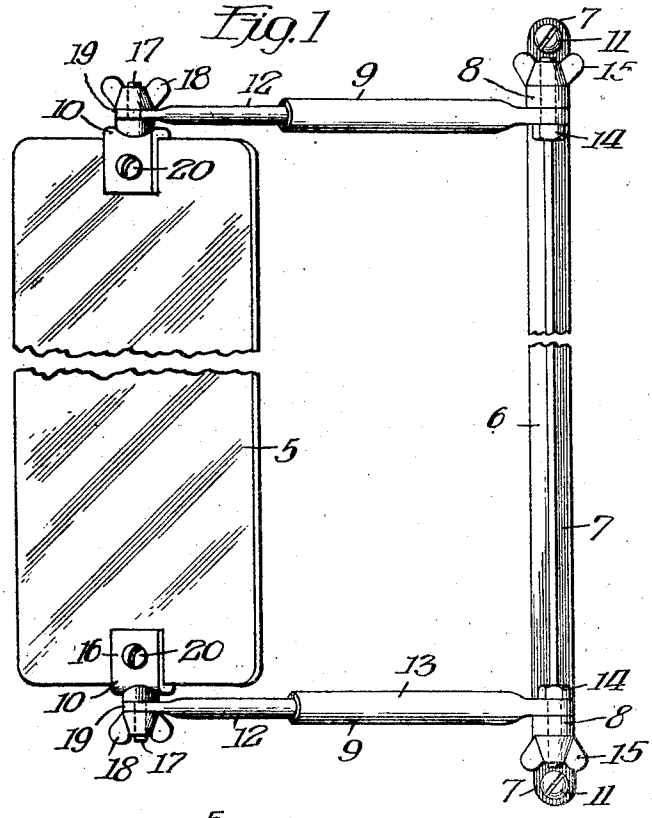


Fig. 3

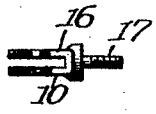
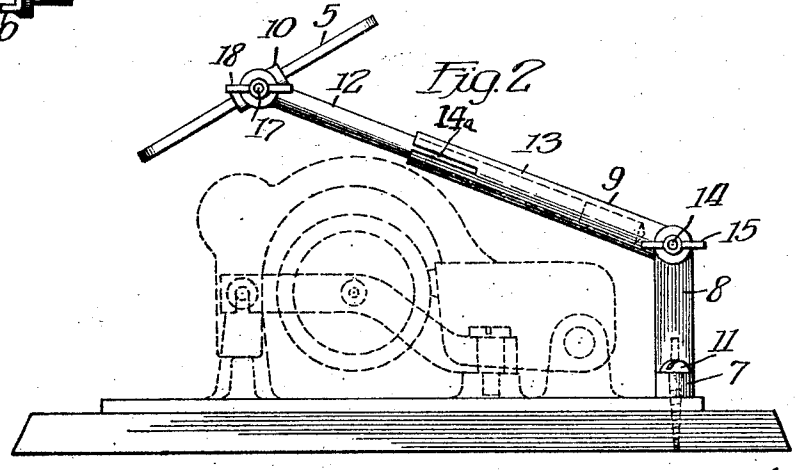


Fig. 2



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UNITED STATES PATENT OFFICE.

GERTRUDE DREESE, OF NEENAH, WISCONSIN, ASSIGNOR OF ONE-HALF TO MILAN G. HOYMAN, OF NEENAH, WISCONSIN.

SHIELD.

Application filed February 9, 1924. Serial No. 691,859.

To all whom it may concern:

Be it known, that I, GERTRUDE DREESE, a citizen of the United States, and resident of Neenah, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Shields, of which the following is a specification.

This invention relates to shields for use in connection with machines for shaving the cylindrical records of phonographs or dictaphones and has for its primary object to provide a simple and efficient device of this character.

After a record cylinder has been used, it is placed in a special shaving machine which removes sufficient material from its recording surface to eliminate the previous record and enables the cylinder to be used again for recording purposes. These cylinders are rotated at a high rate in the shaving machine and the shaving is generally performed by a knife which is held in contact with the surface of the cylinder by a weight. The cylinder is constructed of a relatively brittle composition which is liable to crack and the cracks are often invisible. When the knife comes into contact with one of these cracks during the shaving operation, the cylinder is generally disrupted and the operator is liable to be seriously injured by the flying bits. In order to fully protect the operator from injury, I have devised a form of shield which does not obstruct the vision of the operator or in any way interfere with operating of the machine. At the completion of the shaving operation, the shield is readily moved into a position which enables the cover of the cabinet to be closed.

The many other objects and advantages of my invention will be better understood by reference to the following specification when considered in connection with the accompanying drawing illustrating a selected embodiment thereof, in which:—

Fig. 1 is a plan view of the shield.

Fig. 2 is an end elevation, the shield being mounted on the platform of a shaving machine, and

Fig. 3 is a detail view.

Referring to the drawing, the shield comprises a guard plate 5 and a support 6. The plate 5 may be made of any suitable transparent material having the necessary strength, but I prefer glass of the kind generally termed "non-shatterable." Reinforced glass may be used.

The support comprises a base 7 provided with upright posts 8 near each of its ends, extensible arms 9 adjustably mounted on these posts, and clamps 10 at the outer ends of these arms to engage the ends of the guard plate 5. The base 7 is preferably screwed or otherwise fastened to the top platform of the shaving machine as at 11.

The arms 9 in the present embodiment are of the telescoping type and comprise tubular members 12 and 13, the members 12 slidably fitting within the bore of the corresponding members 13. The outer end portions of the members 13 are preferably split as at 14^a, and these portions slightly contracted to frictionally grip the corresponding members 12 and resist relative movement. The inner ends of the members 13 are connected to the upright posts 8 by means of bolts 14 provided with wing nuts 15 to permit the arms to be readily clamped to the posts at any angle.

The clamps 10 in the present embodiment consist of a U-shaped member 16 provided with a projecting stud 17 threaded to receive a clamping nut 18. The eye 19 at the end of the corresponding member 12 slips over this stud and is held thereon by the nut 18. The clamp is secured to the edge of the plate by means of a screw 20 which passes through perforations provided for the the purpose in the plate and the arms of the member 15. This construction enables the plate to be set at any angle relative to the arms 9.

From the foregoing description it will be obvious that the plate may be readily moved to practically any desired position relative to the shaving mechanism. The arms may be set at any angle relative to the upright posts supporting them and the plate may likewise be adjusted relative to the arms. The length of the arms may be varied by merely pushing or pulling the guard plate. Machines of this type are usually provided with a cover (not shown) to protect the mechanism when the machine is not in use. My shield may be installed in these machines as now constructed, for the guard plate may be moved inwardly and permitted to rest on the top of the machine. The cover may then be closed in the usual manner.

While my improved shield is shown and described in connection with a shaving machine for cylindrical records, it will be evident that it is equally applicable to any other machine where the operator needs protection from flying particles. Colored guard plates may be used where it is advisable to protect the eyes of the operator from strong light.

I am aware that the form and arrangement of parts may be changed without departing from the spirit of my invention, and I reserve the right to make all such as fairly fall within the scope of the following claims.

I claim as my invention:

1. In a protecting shield, a guard plate of substantially transparent material, and means for supporting said plate comprising upright posts, telescoping arms mounted on said posts and angularly adjustable relative thereto, and members on the outer extremities of said arms for engaging opposite edges of said plate.

2. In a protecting shield, a guard plate of substantially transparent material, and means for supporting said plate comprising upright posts, telescoping arms mounted on said posts and angularly adjustable relative thereto, and members adjustably mounted on the outer extremities of said arms for engaging opposite edges of said plate.

3. In a shield of the class described, a guard plate of transparent material, and a support for said plate comprising a base, upright posts located at substantially opposite ends of said base, an extensible arm mounted on the upper extremity of each of said posts and angularly adjustable relative thereto, means adjustably mounted on the outer extremities of said arms for engaging the edges of said guard plate to connect said plate and said arms, and means for clamping said connecting means in any adjustable position.

4. In a shield of the class described, a guard plate of substantially transparent material, and a support for said plate comprising a base adapted to be fastened upon a supporting surface, upright posts located at substantially opposite ends of said base, a telescoping arm pivotally connected at its inner end to the upper end of the corresponding post, means for clamping said arms to said posts in any adjusted position, plate engaging members pivotally mounted in the outer ends of said arms, and means for clamping said engaging members to said arms in any adjusted position of said members.

GERTRUDE DREESE.