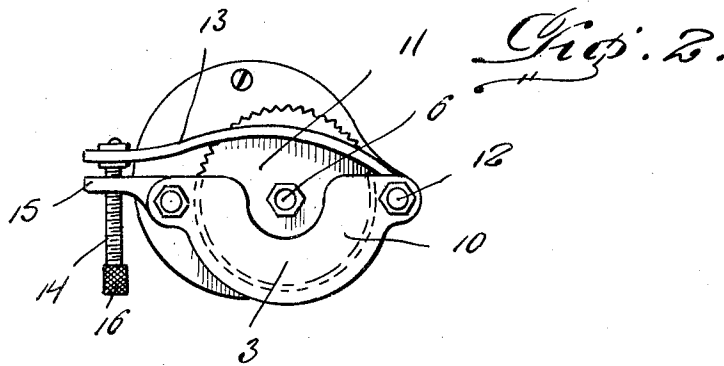
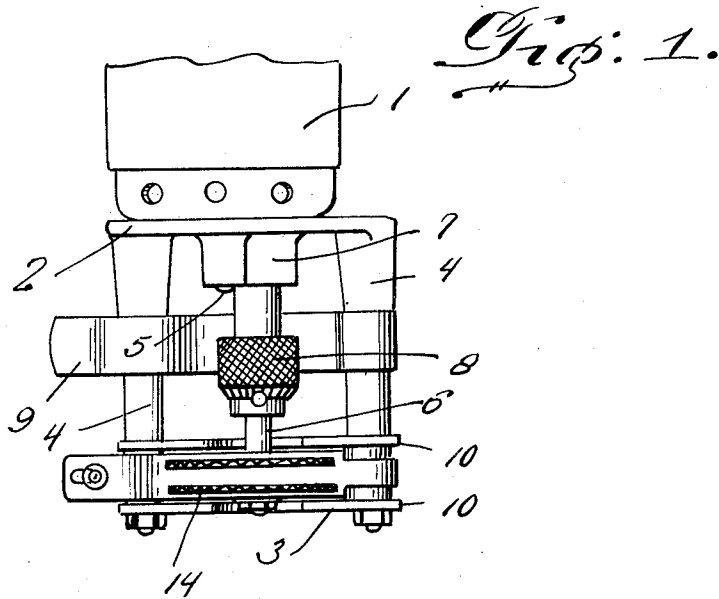


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D. G. SAYRE
PLASTER CAST SAW
Filed Dec. 16, 1925



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PLASTER-CAST SAW.

Application filed December 16, 1925. Serial No. 75,788.

My present invention has to do with the removal of plaster cast from patients, and it relates more especially to what are known as plaster cast saws designed and adapted for the cutting and removal of plaster cast from patients.

One of the objects of my invention is the provision of an advantageous organized mechanism adapted to be handled and regulated or controlled with facility so as to effectively remove a plaster cast without liability of injuring a patient or subjecting him to discomfort.

Another object of the invention is to provide a device of the kind indicated embodying sawing means, and guard means complementary to the sawing means and through the medium of which the depth of cut may be regulating and the making of an unduly deep cut obviated.

Other objects and practical advantages of the invention will be fully understood from the following description and claims when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:—

Figure 1 is a view in elevation illustrating one end portion of a plaster cast saw constituting the preferred embodiment of my invention and one which has been successfully used.

Figure 2 is an end elevation of the device illustrative of the saw means, the guard complementary to said saw means, and the means for adjusting and adjustably fixing the guard.

Similar numerals of reference designate corresponding parts in both views of the drawings.

Among other elements my novel apparatus comprises an electric motor 1, and in the actual reduction of my invention to practice hereinbefore referred to the said motor is equipped at its back with a handle including a bail and a hand grasp interposed between the ends of the bail. I have, however, deemed it unnecessary to illustrate the said handle.

In addition to the electric motor 1 my novel apparatus includes a frame disposed at the opposite side of the electric motor, with reference to the handle alluded to. The said frame is made up of a head 2 immediately adjacent and fixed to the casing of the electric motor, a head 3 spaced from the head 2 and remote from the said electric

motor, and struts 4 interposed between the said heads 2 and 3 and functioning to maintain the said heads in spaced relation and fixed with respect to each other.

The armature shaft of the motor 1 is designated by 5, and parallel to the said armature shaft 5 is an arbor 6 which may be and preferably is connected with the armature shaft by conventional reducing gears located in a casing 7. At 8 is a chuck, and at 9 is an appurtenance mounted on the struts 4 and adapted to serve a purpose hereinafter referred to.

The head 3 is formed by two parallel plates 10, preferably of the configuration best shown in Figure 2, and between the said plates 10 are located and adapted to operate the saws 11 which are appropriately fixed on the arbor 6 and are spaced apart in parallelism as illustrated. Hingedly connected at 12 to the head plates 10 is the saw guard which constitutes an important feature of my invention. The said guard is provided with parallel slots 14 for the projection and play of the saws, and connected to the free portion of the guard 13 in swivelled manner is an adjusting or regulating screw 14 which is threaded through a bearing 15 carried by the head plates 10, and is equipped, by preference, with a knurled head 16. Manifestly by adjusting the screw 14 the guard 13 may be positioned so that more or less of the saw blades or saws may be projected beyond the guard 13 for sawing or cutting purposes. It will also be appreciated that by positioning the guard 13 and adjustably fixing the same as conditions require, the depths of the cuts made by the saws may be increased or diminished as occasion demands, and in all cases the guard 13 may be so set as to preclude the possibility of the saws cutting or rendering a patient uncomfortable.

Notwithstanding the practical advantages ascribed to my improvement, it will be appreciated that the improvement is simple and inexpensive in construction, is adapted to be readily handled and operated, and is not liable to get out of order after a short period of use.

I have specifically described the present and preferred embodiment of my invention in order to impart a full, clear and exact understanding of the said embodiment. I do not desire, however, to be understood as confining myself to the specific construction and relative arrangement of the parts as dis-

closed, my invention being defined by my appended claims within the scope of which changes in structure and arrangement may be made without departure from my invention.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:—

1. A plaster cast saw of the class described including a frame having a head adapted to be attached to a motor and a second head spaced from the first head, means connecting the heads and maintaining the same in spaced relation, an arbor mounted in the first head to extend between the two heads, saw means carried by and driven through said arbor, said second head including a pair of parallel spaced plates between which the saw means is located, a guard pivotally mounted at one end between adjacent ends of the plates and having a slot through which the saw means may extend, a pivoted member mounted between the other ends of the

plates, and a screw swivelly mounted at the free end of the guard and threaded through the pivoted member.

2. A plaster cast saw of the class described including in combination, a plate adapted to be fixed to a motor housing, an arbor mounted in the plate and adapted to be operably associated with the armature shaft of the motor, struts projecting from the plate, a pair of plates mounted in spaced relation to each other on the extremities of the struts, a guard plate pivotally mounted on one end on one of the struts between the pair of plates, a member mounted on the other strut between the pair of plates, the free extremity of the guard being provided with a slot, and a screw swivelly mounted in the slot and threaded through the member, said guard being provided with a longitudinal slot between its ends for receiving a saw mounted on the arbor.

In testimony whereof I affix my signature.
DUANE G. SAYRE.