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CANNULA HOLDER
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FIG. 1.

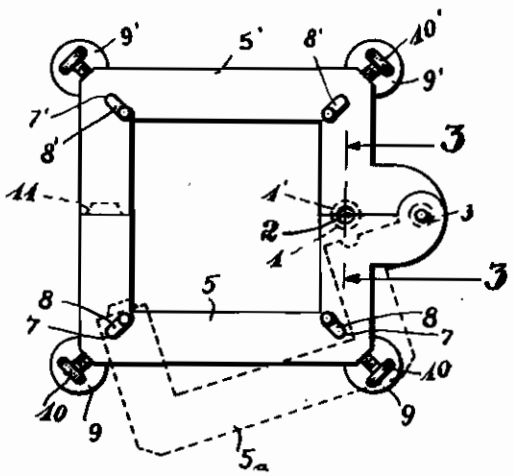


FIG. 3.

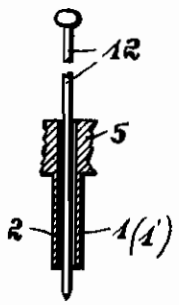
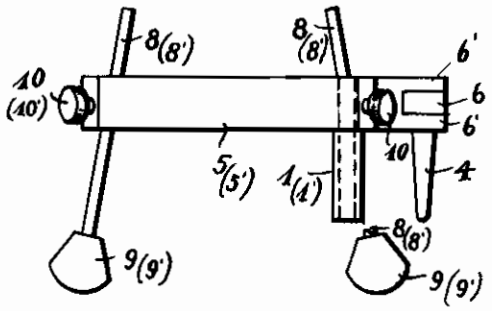


FIG. 2.



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ALIEN PROPERTY CUSTODIAN

CANNULA HOLDER

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Application filed April 28, 1939

This invention relates to devices used for applying a cannula or similar instrument with the least vibration and positively located.

One of the objects of this invention is to provide a device that will hold an instrument firmly, and steadily in relation to the location to which an instrument of such a type is to be applied.

Another object is to provide a device that can be adjusted to a certain angle at which an inserted instrument can act most advantageously.

Another object is to provide a device that can readily be applied and removed while an instrument of the type referred to may be in operating position.

Another object is to provide a device that can be adjusted to suitably draw to, and hold material in, an advantageous tight or stretched condition, whereby to better facilitate a proper application of an instrument that is supported by the device.

Another object is to provide a device of this type with means whereby a good contacting and desirable holding may be assured.

Other objects will appear from the following description and appended claims as well as from the accompanying drawing, in which—

Fig. 1 is a top plan view of the device without any instrument inserted, being in closed and operative position, and having one half indicated in dotted lines to illustrate the opening of the device.

Fig. 2 is a side elevation of the device shown in Fig. 1, the adjustable supporting legs being partly broken away to not interfere with a clear illustration of the guiding tube member.

Fig. 3 is a fragmentary vertical section through the guiding tube member, having a portion of an instrument inserted therethrough.

Any one who ever had to make injections through the skin will admit that difficulties are encountered in various ways.

Whether a plain cannula, or any other suitable instrument is used, such as a hypodermic needle, it requires considerable experience to hold any such instrument steadily and properly pointed to accomplish a required injection to the proper location and in a proper direction.

Even though it may be said that persons using such instruments should be expected to have the necessary skill to assure a proper handling, it is believed that the device disclosed herewith will be of great help to eliminate, or reduce, undue strain on the nerves of such persons.

Particularly, it should be possible to eliminate any bending of any needle-like member to an extent to prevent any breaking.

Assuring a more steady application of any instrument should also eliminate any undue bending to any extent that might otherwise, without such a device, result in any undue deflection of the needle during injection.

The main frame of the device consists of two halves 5 and 5', connected by the hinge portions 6 and 6'. This frame is preferably of a form that allows a clear observation of a suitably large surface, upon which this device is to be used, the two halves 5 and 5' being therefore of somewhat a U-form, as will be clear from the illustration.

For the purpose of properly supporting and holding the frame on a surface, the adjustable legs 8 and 8' are provided with friction contacting means 9 and 9', which may be of rubber, or any other suitable material.

The legs 8—8' pass through holes 7—7' at the corners of the frame, the holes being provided at an angle through the frame for purposes described more fully later on.

Adjusting screws 10—10' serve to hold the legs in adjusted position within the frame.

A split tubular member is provided at a suitable point of the frame having an extension end 1—1' projecting from the underside of the frame a suitable distance, forming a guiding passage 2.

Also projecting from the underside of the frame is a guiding and locating post 4, being of approximately the same length as the tubular member 1.

Using the locating post 4 as a primary means for establishing contact with the surface upon which the device is to be used, it facilitates a definite placing of the device with regard to a point at which an injection is to be made preparatory to adjusting and setting the legs 8—8'.

In using the post 4 as a preliminary locator and guide, moreover, the frame may be swung to any incline to align the passage through the tubular member 1—1' with the point of intended injection and in the proper direction, facilitating a corresponding setting of the several legs to such incline-position so that the whole device may finally form a firm base by means of which a perfect injection can be expected and assured.

Furthermore, inasmuch as the desired proper positioning can be maintained by means of the locating post, the skin of the surface upon which the device is placed can be drawn and stretched by the fact of the inclined arrangement of the

legs, which will serve to further draw the skin from the moment that the contacting means 9—9' take hold.

From the above description and from the illustration, it should be clear that the downwardly spreading legs will assure exactly such a result, since the contacting means 9—9' of the legs 8—8' separate more and more as the legs are pushed outwardly further and further.

After the device has been adjusted to form a firmly established base, any co-operating instrument, such as merely roughly outlined at 12 in Fig. 3, is simply inserted into, and passed through, the passage 2 of the tubular member 1.

In cases where it is desirable, the device may readily be removed while the instrument is still in operating position, since the device may be opened as indicated in dotted lines in Fig. 1.

For injections along a spinal column, this device is of particular aid, since the locating post 4 can be used for finding the open spaces of the spine, or indicating the end of the processus spinosus, and the legs can be adjusted to bring the guiding tubular member to the desired angle for a proper injection into any desired space with regard to the column.

The stretching of the skin by means of the spreading legs furthermore facilitates the injection of any instrument, and a bending of the instrument, or any slipping of the hand on the surface of the skin is much less possible, so that misplacements of injections may be practically prevented.

Due to eliminations of touches of skin in the operating field by the hand of the operator, infections, or complications, in spine diseases may also be greatly prevented.

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