J. HAMPSON.

MAGNIFYING GLASS.

APPLICATION FILED MAR. 17, 1911.

1,025,057. Patented Apr. 30, 1912.

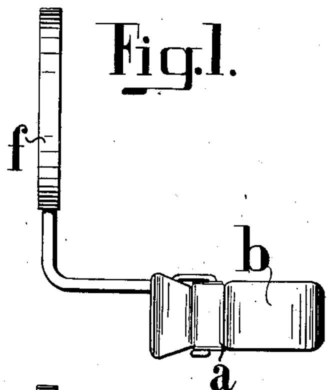

Fig.1.

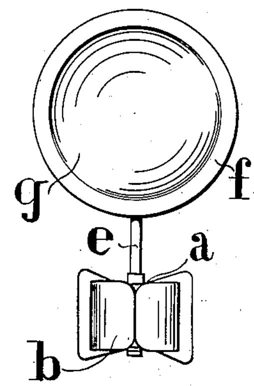

Fig.3.

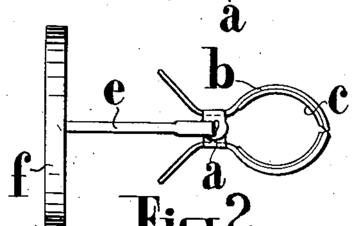

Fig.2.

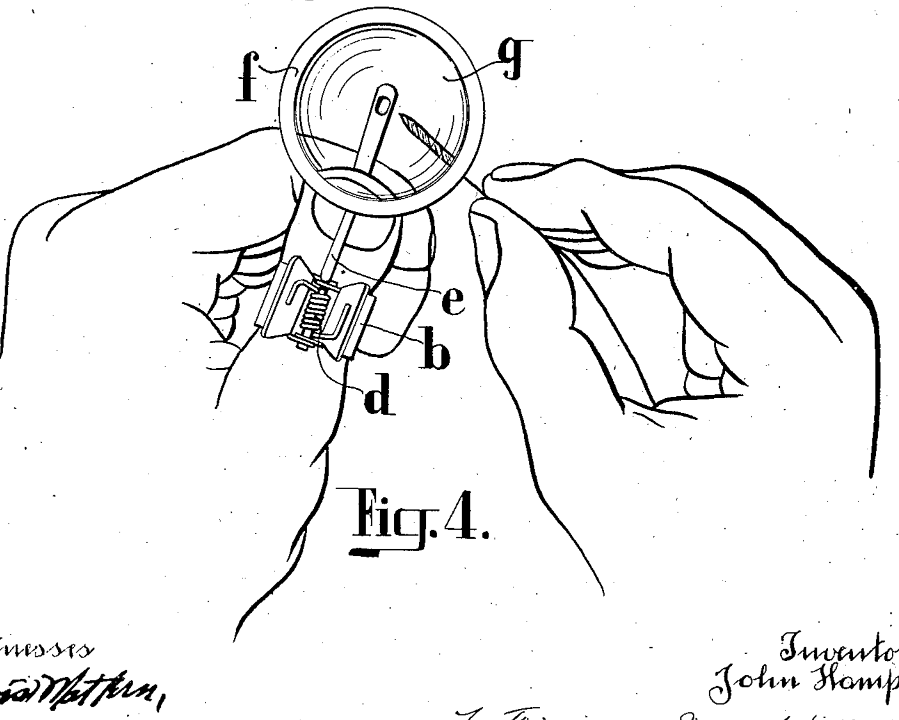

Fig.4.

Witnesses

Inventor
John Hampson
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UNITED STATES PATENT OFFICE.

JOHN HAMPSON, OF CHILWORTH, ENGLAND, ASSIGNOR TO THIRD HAND PATENTS LIMITED, OF LONDON, ENGLAND.

MAGNIFYING-GLASS.

1,025,057. Specification of Letters Patent. Patented Apr. 30, 1912.

Application filed March 17, 1911. Serial No. 615,094.

To all whom it may concern:

Be it known that I, JOHN HAMPSON, a subject of the King of England, residing at Tangley Mere, Chilworth, Surrey, England, have invented certain new and useful Improvements in Magnifying-Glasses, of which the following is a specification.

It is very often found in practice that it is extremely difficult to hold a magnifying glass or other optical instrument, owing to the fact that it is often desirable to have the fingers of both hands free for manipulating the article which it is required to view through the optical instrument, which with the usual construction of simple optical instruments is an impossibility, owing to the fact that one of the hands or at least the thumb and one or more of the fingers of one of the hands have to be used for holding the instrument.

My present invention relates to a method of constructing optical instruments by means of which the instrument or its parts may be carried in any convenient position while at the same time the hands are left perfectly free to hold or manipulate the article which is being examined.

The invention consists generally in attaching to the frame of the lens or other optical instrument a spring clip or the like by means of which the instrument may be clipped on to the thumb or one of the fingers or on to some other part of the person or to an article as required.

In one particular method of carrying out my invention, I provide a spring clip having curved jaws of suitable size to embrace the thumb. This spring clip has attached to it a wire preferably of soft metal such as copper, which wire carries at the opposite end the frame of a lens of any suitable description. When utilizing this device it is simply necessary to spring the clip over the thumb or finger of one of the hands, and then to bend the wire so as to adjust the lens at the proper distance from the article to be viewed, when the thumb and all the fingers of the hand carrying the lens are perfectly free for manipulating the article. And in order that my said invention may be better understood, I will now proceed to describe the same with reference to the drawing accompanying this specification in which:—

Figure 1 shows a side elevation of the device; Fig. 2 is a plan of same; Fig. 3 is a side elevation. Fig. 4 is a view illustrating one application of the device.

The same letters of reference are employed to denote the same parts in all the views.

a is a clip provided with jaws *b* which are lined with felt or other soft material *c*.

d is a spring which tends to keep the jaws normally closed.

e is a copper wire which passes through the clip *a* and is bent approximately at right angles and has attached at the other end the frame *f* of a lens *g*.

In using the device shown for instance at Fig. 4, where it is being utilized to facilitate the threading of a needle, the jaws *b* of the clip *a* are opened and then the clip is sprung over the thumb of the left hand. The strip *e* of copper wire is then bent so that the lens *g* is brought into the proper position for viewing the eye of the needle. It will be seen that it is quite easy for the thread carried in the right hand to be threaded through the eye of the needle.

It will be understood that devices of this description can be adapted for a great number of uses, where it is desired to have the fingers free for holding or manipulating the articles to be viewed. For instance, they may be adapted for ophthalmic work, the ophthalmoscope being provided with a clip by means of which it can be attached to the hand of the oculist, while his fingers are left perfectly free for manipulating the eyes. The device may also be adapted for the use of philatelists to enable them to examine perforations, water marks and other details in connection with stamps with great facility, while having the fingers free for holding or manipulating the stamps.

For jewelers and lapidaries the device will be of extreme utility as it will enable them to manipulate small parts such as screws and the like and polish and set stones with the greatest facility. For en-

gineers again the device would be of use for setting instruments, gages and for other fine work where it was desired to use both hands, or for reading the fine graduations on instruments.

It will be observed that the method of carrying out the invention herein described and shown with reference to the accompanying drawing is given merely by way of example, as instead of using wire of soft metal, such as copper, to allow the lens to be brought into the correct focal position by bending such wire, the lens may be attached by means of a series of rods which can telescope with respect to one another and be provided with suitable joints so that the lens can be brought in any required position with respect to the clip.

Other species of clips besides spring clips as before described may be adapted to the device provided it is a clip which can be quickly and easily attached over the finger, wrist, article of clothing or other object.

In some cases in place of using a simple lens compound or combination lenses may be used in connection with the optical instrument, and in other cases the lens or one or more of the lenses may be of smoked or colored glass for intercepting a certain amount of light where it is required to shield the eyes from a too brilliant illumination. Again, in other cases, the instrument may be so constructed that various lenses may be fitted to it, so that a lens of one power may be removed and replaced by a lens of different power to suit requirements.

What I claim and desire to secure by Letters Patent of the United States of America is:—

1. The combination of a magnifying glass, a clip consisting of a pair of pivotally connected members having oppositely curved jaws for gripping a thumb below the joint, a spring for holding the jaws of said members in their gripping positions, means for opening the members, a lining on the inner sides of the jaws of the members, and an adjustable connection fixing the magnifying glass to the clip, substantially as described.

2. The combination of a magnifying glass, a clip consisting of a pair of members, the members comprising oppositely curved jaws forming a clamp for gripping a thumb below the joint and handles having lugs extending inwardly, a rod passing through said lugs and connected to the magnifying glass, and a spring on the rod between the lugs and having its free ends engaging the handles tending to hold the jaws in their gripping positions, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN HAMPSON.

Witnesses:
LILY SIMMONDS,
A. E. VIDAL.