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FRAME FOR SPECTACLES, EYEGLASSES, AND THE LIKE.

APPLICATION FILED MAR. 31, 1913.

1,109,285. Patented Sept. 1, 1914.

Fig. 1

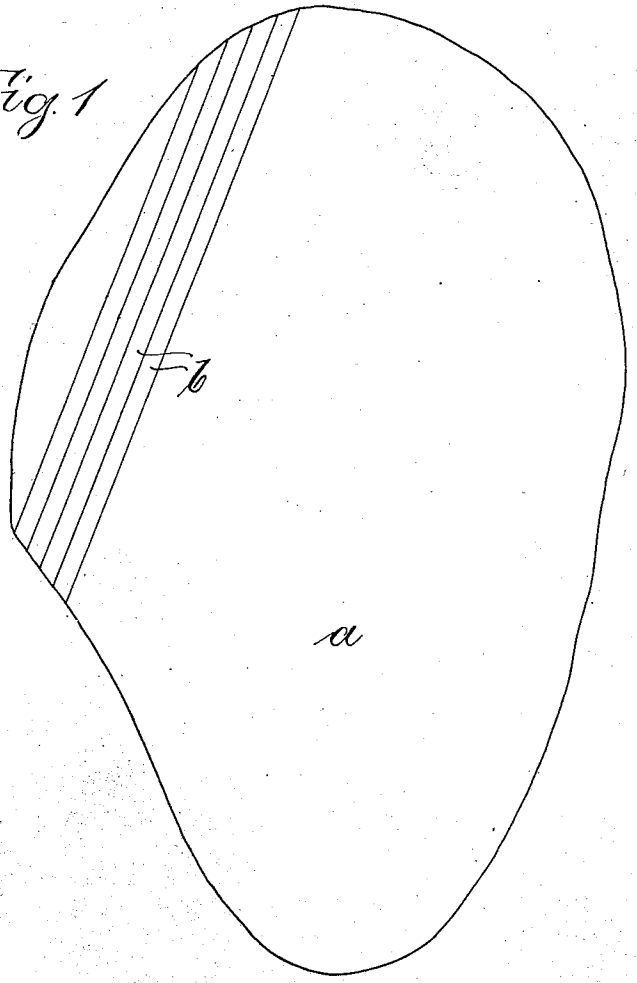
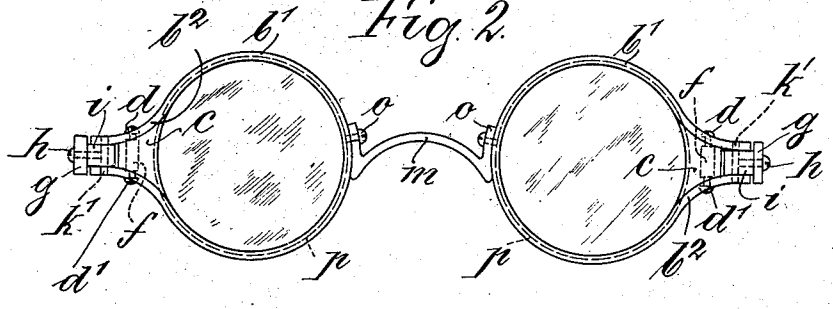


Fig. 2.



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UNITED STATES PATENT OFFICE.

HEINRICH HAASE, OF RATHENOW, GERMANY.

FRAME FOR SPECTACLES, EYEGLASSES, AND THE LIKE.

1,109,285 Specification of Letters Patent. Patented Sept. 1, 1914.

Application filed March 31, 1913. Serial No. 757,889.

To all whom it may concern:

Be it known that I, HEINRICH HAASE, subject of the King of Prussia, residing at Rathenow, in the German Empire, have invented certain new and useful Improvements in Frames for Spectacles, Eyeglasses, and the like, of which the following is a specification.

This invention relates to the manufacture of the frames of spectacles, eye-glasses, lorgnettes and the like and more particularly to the manufacture of such frames from tortoise-shell, horn, and fibrous or grained material. Hitherto such frames have been cut from sheets of the material to the required circular or oval shape. This method, however, results in great waste of material while the insertion and removal of the lenses is difficult as the frames require to be previously heated. Furthermore, frames from such fibrous material as tortoise-shell, horn and the like are deficient in strength owing to the fact that the greater part of the frame is of necessity cut across the grain. Such frames easily split when being bored or when the lens does not fit truly therein.

According to the present invention the sheet material is cut lengthwise of the grain into straight strips which are then bent into the required shape to form the frames, so that, the grain will extend circumferentially around the lens.

In order that the invention may be more clearly understood reference is made to the accompanying drawings whereon—

Figure 1 illustrates the manner in which the strips are cut from a sheet. Fig. 2 shows in front view a spectacle frame by way of example constructed according to the present invention.

As illustrated in Fig. 1 the sheet a is cut into strips b of rectangular or approximately rectangular cross-section, the fibrous or grained material, being cut lengthwise of the grain. Owing to the structure of the sheets the latter should preferably be of such thickness and the strips be so cut therefrom that the narrow sides of the strips are constituted by the cut surfaces, that is to say, are at right angles to the grain of the sheet, thus insuring the greatest possible strength and elasticity.

The manner of bending the strips b to form the frame will be readily apparent from Fig. 2 of the drawings and it will be seen that the grain of the lens frames b^1 will be in a direction circumferential to the lens. In order to securely fasten the meeting ends b^2 of the frames b^1, the ends b^2 are preferably bent outwardly at only a slight curvature and instead of being directly screwed or riveted together a block c of the desired shape is inserted between the ends b^2 and secured thereto by means of screws or the like d, d^1. As the screws d and d^1 are subjected to considerable tension they are preferably not merely screwed into the block c but are screwed into an internally screw threaded metal sleeve f let into the block c. The ear-pieces g which may also be of tortoise-shell or like material are each provided with an eye i secured thereto by means of a screw h and turn about a pin k^1 passing through the ends b^2 of the frames b^1. The bridge piece m, likewise bent from a strip b, is secured to the frames b^1 by means of screws or rivets o. The frames b^1 may be provided with the usual groove p for the reception of the lenses.

It will be seen that by this construction, owing to the parts of the frame being cut lengthwise of the grain, the frame is capable of considerable elasticity and can adapt itself to the shape of the lens and is better able to withstand vibrations than frames cut to the required circular or oval shape from the sheet Moreover, the material does not split or break off on boring it for the reception of rivets or screws. The lenses can also be inserted and replaced without heating.

I claim:—

1. A frame for spectacles and eye-glasses comprising strips of straight-grained material of animal origin, the grain being lengthwise of the strips.

2. A frame for spectacles and eye-glasses comprising strips of straight-grained albu-

minous material, the grain being lengthwise of the strips.

3. A frame for spectacles and eye-glasses comprising, in combination, two bent strips forming the lens mounts, a bridge-piece connected thereto, a block intermediate the meeting ends of each of said strips, an internally-threaded sleeve in said block, and screws passing through said meeting ends into said sleeve.

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

HEINRICH HAASE.

Witnesses:

HENRY HASPER,

WOLDEMAR HAUPT.