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G. J. JAYLE
 AUTOMATIC EYELIDS EYEBALL FIXING DEVICE
 FOR A SURGICAL INTERVENTION
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2,845,925

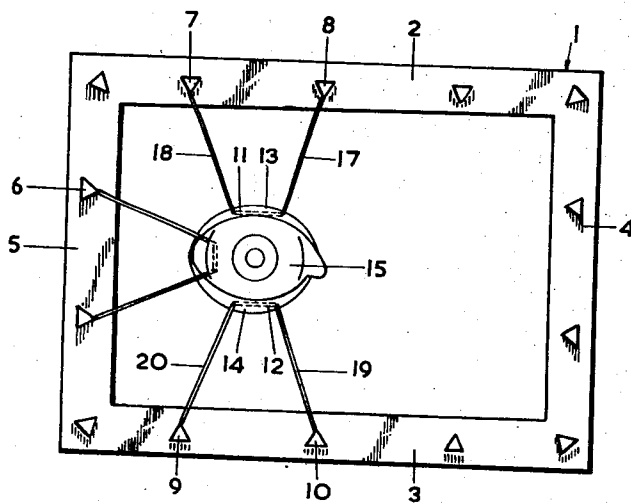


FIG. 1

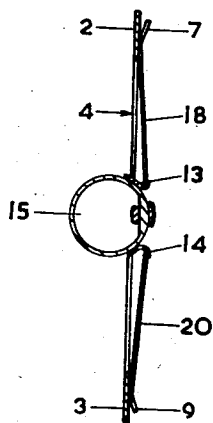


FIG. 2

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AUTOMATIC EYELIDS EYEBALL FIXING DEVICE FOR A SURGICAL INTERVENTION

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3 Claims. (Cl. 128—20)

This invention relates to apparatus for use in surgery 15
applied to the eye.

The object of the invention is to provide a particular-
ly simple device which is flexible so as to permit fitting
to the differently shaped features of patients, and which
serves to retain both the eyeball and the eyelids in a
desired position for surgery with a minimum of inter-
ference with the available operating space.

According to the present invention a device for secur-
ing the eyelids and the eyeball of a patient in position
during surgery comprises an encircling frame of flexible 25
sheet material to lie on and adapt itself to the contours
of the patient's face surrounding the eye, a plurality of
thread-securing means spaced at intervals on the frame,
and a plurality of threads for coupling between the
upper and lower eyelids and the thread-securing means
on adjacent portions of the frame, whereby the frame 30
may be retained in position with respect to the eye by
the opposed tensions in the threads attached to the upper
and lower eyelids.

An embodiment in accordance with the invention is
hereinafter particularly described with reference to the
accompanying drawing wherein: Fig. 1 is an elevation of
the device as applied to, and serving to secure in posi-
tion, an eyeball and eyelids; Fig. 2 is a schematic vertical
section through the device, eyeball and eyelids.

In these figures, a frame 1, made of flexible material, 40
has four members 2, 3, 4 and 5 arranged as a rectangle.
On the frame members are provided raised tags 6, 7, 8,
9, 10 which serve as a simple and effective means for
releasably securing the ends of threads 11, 12 inserted 45
respectively through the upper eyelid 13 and the lower
eyelid 14. The eyeball 15 likewise has a thread passed
through it and the two ends of the thread are engaged
with partially punched-out tags on the lateral frame
member 5. The ends 17, 18 of the thread 11 are pulled 50
to a sufficient tension to retain the eyelid 13 in a suitable
position clear of the operating field, the ends 19, 20

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of the thread 12 serving the same purpose for the lower
eyelid 14. Such a device serves to retain the organs
securely in position but is nevertheless flexible and sub-
stantially flat so as to adapt itself to the face of the
patient and thus project to the least possible extent into
the way of the surgeon. Even where a face mask also
has to be used, the present device can be applied over
the mask with equal facility.

When the threads 11, 12 are being applied, their ten-
sion is adjusted so that their resultant pull itself holds
the frame 1 substantially fixed with respect to the eye,
whereby no auxiliary apparatus is required, and the frame
is self-securing in position. Once the threads 11 and
12 have been secured, a further thread can, if necessary,
be applied to the eyeball (as shown) and secured to the
lateral frame members 4 or 5 as required. Preferably
the frame is secured on the face with any suitable ad-
hesive.

I claim:

1. A device for securing the eyelids and the eyeball of
a patient in position during surgery, comprising an en-
circling frame of flexible sheet material to lie on and
adapt itself to the contours of the patient's face sur-
rounding the eye, a plurality of thread-securing means
spaced at intervals on the frame, and a plurality of
threads for coupling between the upper and lower eye-
lids and the thread-securing means on adjacent portions
of the frame, whereby the frame may be retained in
position with respect to the eye by the opposed tensions
in the threads attached to the upper and lower eyelids.
2. A device as claimed in claim 1, wherein the frame
is of rectangular shape and has its opening rectangular
and of approximately three times the width and height
of the eye-socket.
3. A device as claimed in claim 1, wherein the thread-
securing means consist of tags partially punched out of
the flexible material of the frame.

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