

July 20 , 1926.

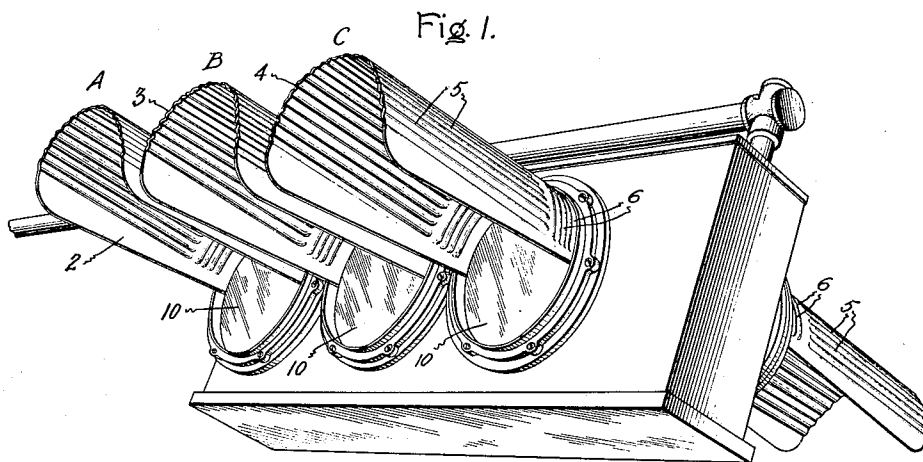
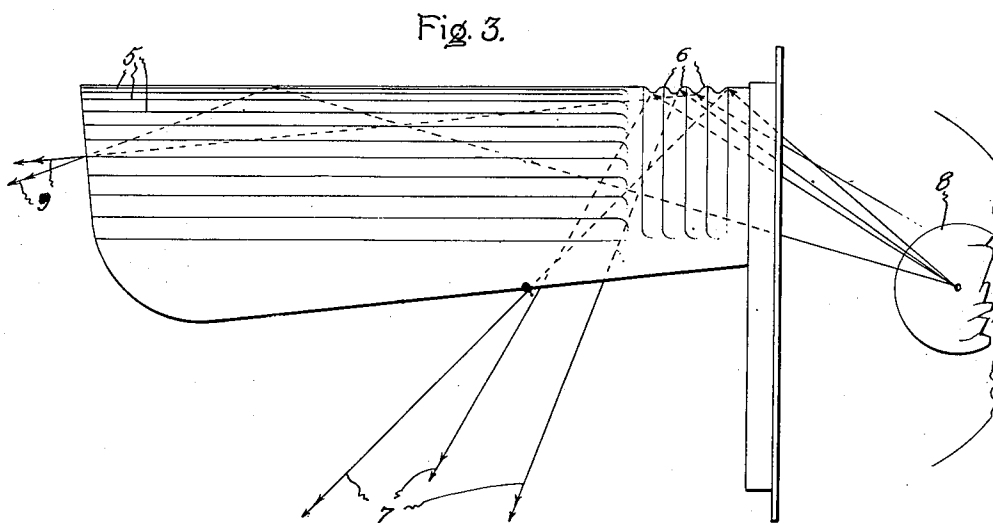
1,593,402

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TRAFFIC SIGNAL

Filed Jan. 24, 1925

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 2.

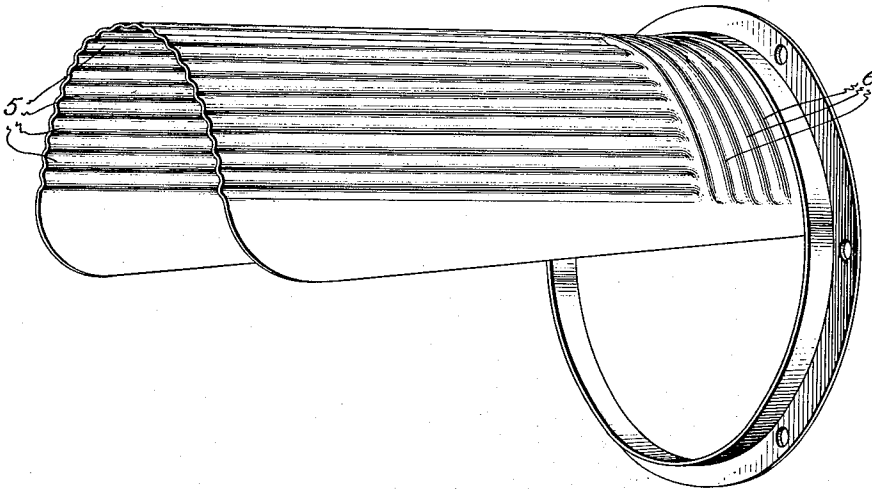


Fig. 4.

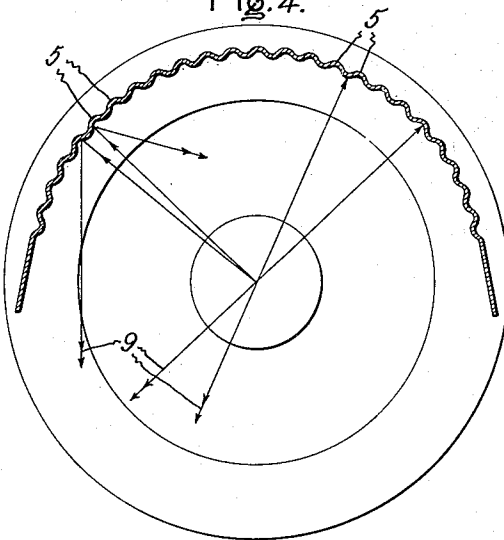
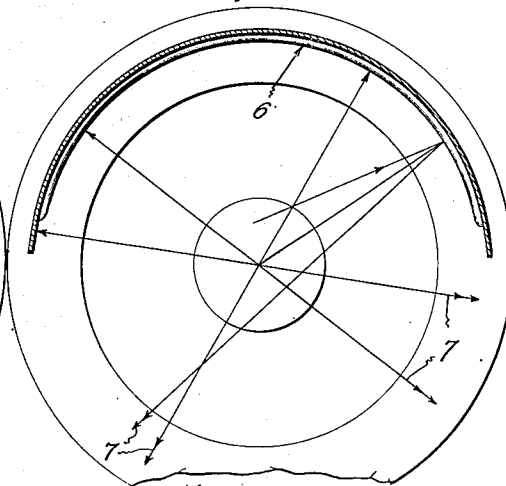


Fig. 5.



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UNITED STATES PATENT OFFICE.

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TRAFFIC SIGNAL.

Application filed January 24, 1925. Serial No. 4,587.

My invention relates to signals and projectors. More particularly it relates to signals adapted for use in connection with street and highway traffic signals.

In connection with signals of this type, it is difficult for the observer to determine the condition of the signal if he is to one side of the signal or if he is too near and under the signal; i. e. if he is too near the plane which passes through the lens of the signal. It is very often the case that traffic signals are located quite high over the surface of the road, in which case the foregoing is particularly true. Therefore, if a vehicle driver is considerably to one side, it is difficult for him to determine the condition of the signal, or if he is quite near the road intersection where the signal is located, the same objection is found.

It is an object of my invention to provide an improved form of signal which will enable the signal operations to be observed with certainty even though the observer is considerably out of line with the signal.

It is also an object to provide an improved form of hood for the signal in order that the rays of light may be spread both laterally and downward in order that the range of the rays of the signal may be broadened.

The means for accomplishing the foregoing are hereinafter more fully set forth and claimed, reference being had to the accompanying drawing in which Fig. 1 shows one form of traffic signaling unit in which each light signal is provided with the improved form of hood of my invention.

Fig. 2 is an enlarged view of the hood. As shown, the hood is provided with two groups of corrugations, one group extending longitudinally of the hood and the other group extending transversely. Fig. 3 illustrates diagrammatically how the hood affects the rays so as to spread them downwardly and also laterally. Fig. 4 is a section across the longitudinal corrugations and represents diagrammatically how the rays are spread laterally by the longitudinal corrugations. Fig. 5 is a section across the hood showing how the transverse corrugations spread the rays downwardly.

Referring more in detail to the drawings, it will be seen that the unit, Fig. 1, is provided with a number of light signals such as the signals A, B and C. Each of these

signals is provided with a hood such as the hoods 2, 3 and 4. As more clearly shown in Fig. 2, the longitudinal corrugations 5 extend from the front toward the back of the hood and as far as the transverse corrugations 6 which latter are grouped at the back end of the hood.

Associated with each signal, and therefore with each hood, there is, of course, the usual source of light 8, Fig. 3. The rays of light from the source which strike the longitudinal corrugations are spread laterally as indicated by the rays 9, see Figs. 3 and 4.

The effect of the transverse corrugations is to direct the rays which strike these corrugations downwardly, as indicated by the rays 7, see Figs. 3 and 5. It will be seen, therefore, that the range of the signal is considerably extended, both laterally and downwardly so that the signal may be effectively observed whether the point of view is taken considerably to one side of the longitudinal axis of either of the signals *a*, *b*, or *c* or quite close to a plane passing through the lenses 10 of the signal.

It will be understood that while I have illustrated my invention in connection with a specific form of device, I do not wish to be limited to such specific construction inasmuch as the principles of my invention are applicable to other modifications the scope of which invention may be readily determined by the claims herein.

What I claim as new and desire to secure by Letters Patent of the United States, is:

1. As an article of manufacture, a reflector in the form of a hood for a light projector, said reflector having longitudinal corrugations and transverse corrugations.

2. In a light projector, a light source and enclosure for the source, an opening in the enclosure through which a beam of light may pass out from the enclosure, a reflector in the form of a hood for the opening, said hood having one group of longitudinal corrugations extending along the forward part of the hood and a second group of corrugations transverse to the direction of the first group and located between the longitudinal corrugations and the opening of the enclosure.

3. As an article of manufacture, a reflector in the form of a hood for a light projector said reflector having longitudinal cor-

rugations and transverse corrugations, the longitudinal corrugations arranged in one group on the forward part of the hood and the transverse corrugations arranged in a group between the longitudinal corrugations and the rear end of the hood. 5

4. A traffic signal comprising a reflector, a source of light in front of said reflector, and a hood over the front of the signal, said

hood being in the form of a concave reflector and being corrugated both longitudinally and transversely with respect to a vertical plane passing through the axis of the signal. 10

In witness whereof, I have hereunto set my hand this 16th day of January, 1925. 15

CROMWELL A. B. HALVORSON, Jr.