

M. L. BLACKBURN & W. A. STELLERS.

SEMAPHORE BLADE.

APPLICATION FILED DEC. 23, 1908.

993,643.

Patented May 30, 1911.

FIG. 1

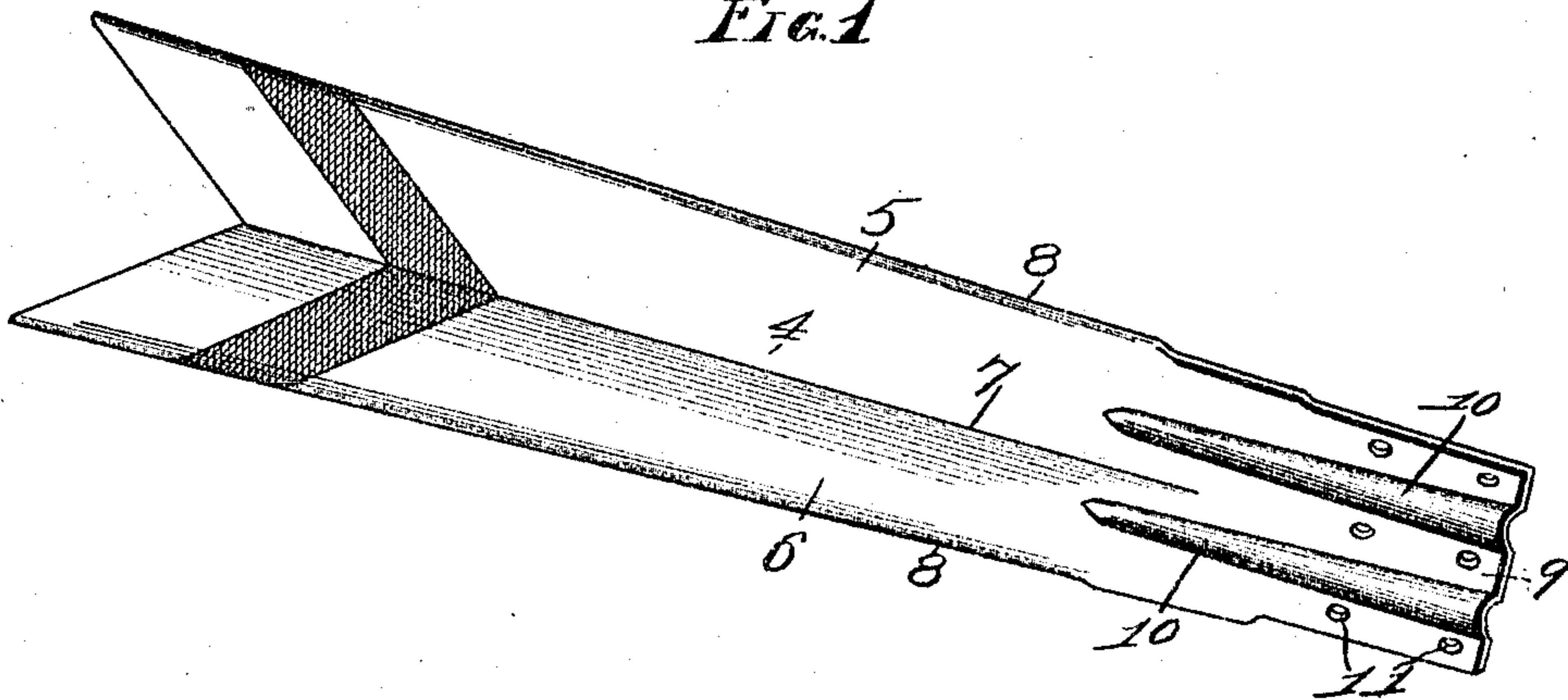


FIG. 2

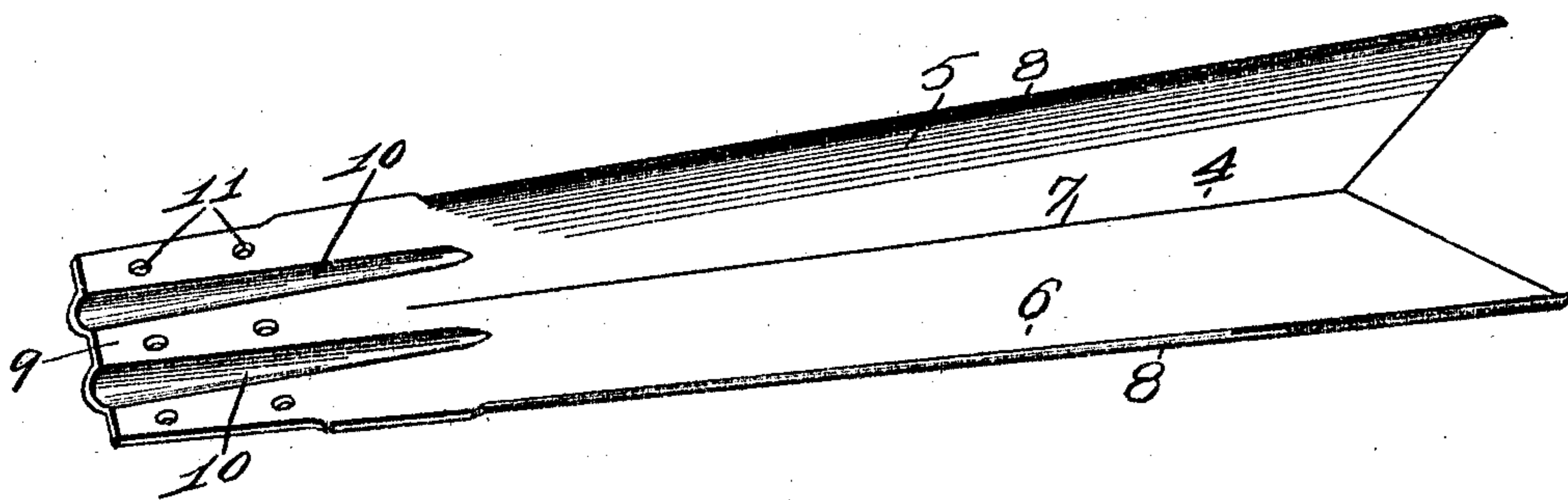
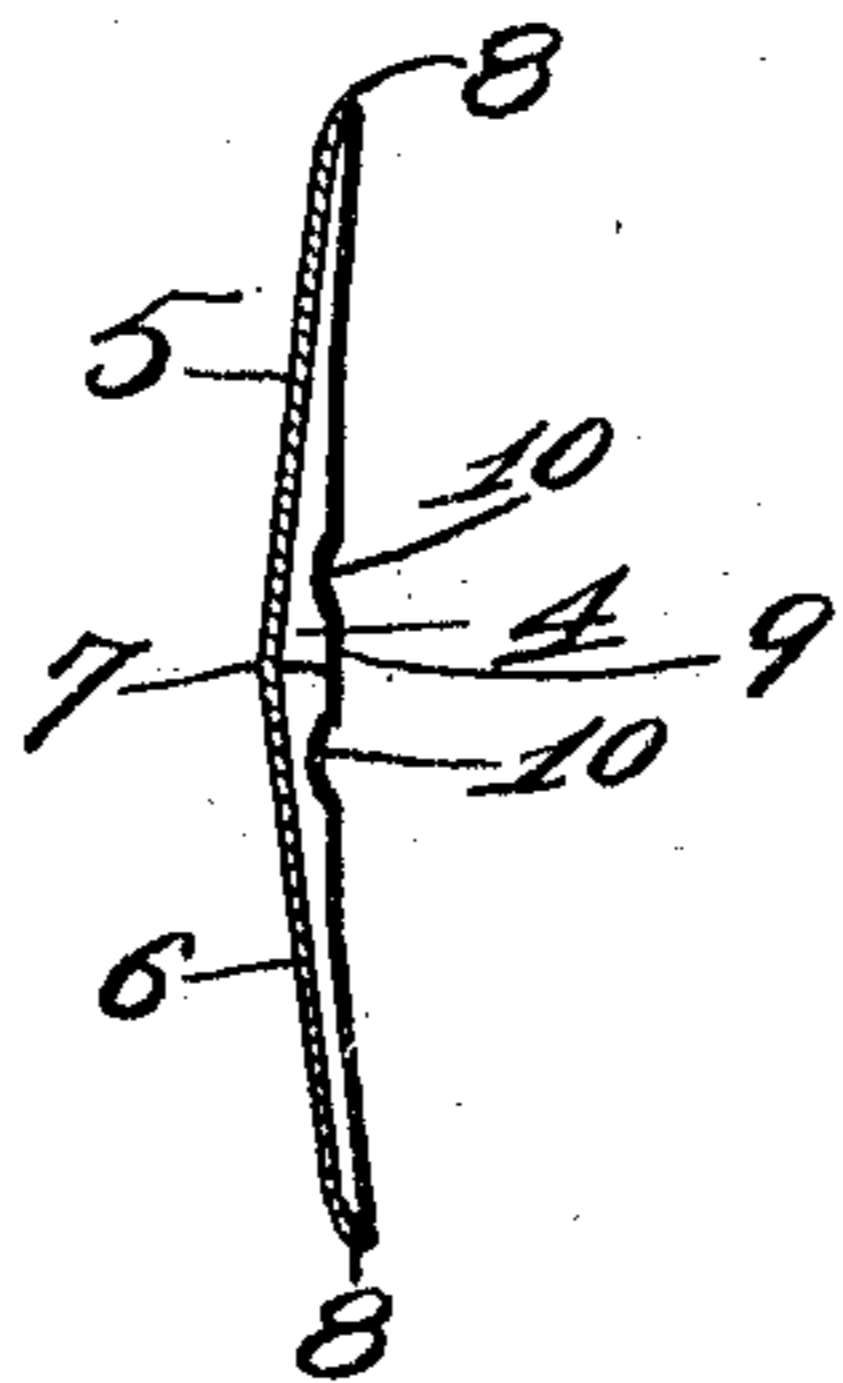


FIG. 3



Witnesses
H. C. Stein
S. A. L. M. Intyre

Inventors
Melvin Louis Blackburn
William Augustus Stellers
by Hopkins & Cicels Attys.

UNITED STATES PATENT OFFICE.

MELVIN LOUIS BLACKBURN AND WILLIAM AUGUSTUS STELLERS, OF BELLAIRE, OHIO,
ASSIGNORS TO SIMMONS HARDWARE COMPANY, OF ST. LOUIS, MISSOURI, A COR-
PORATION OF MISSOURI.

SEMAPHORE-BLADE.

993,643.

Specification of Letters Patent.

Patented May 30, 1911.

Application filed December 23, 1908. Serial No. 469,009.

To all whom it may concern:

Be it known that we, MELVIN LOUIS BLACKBURN and WILLIAM AUGUSTUS STELLERS, citizens of the United States, and residents of Bellaire, Ohio, have invented certain new and useful Improvements in Semaphore-Blades, of which the following is a specification.

This invention relates to improvements in semaphore blades, and has for its object a blade of special formation for creating a rigid, light and durable structure.

In the drawings—Figure 1 is a perspective view of our invention; Fig. 2 is a perspective view of the reverse side of the same; and Fig. 3 is a central sectional view of the same.

Our semaphore blade 4 is formed preferably of sheet steel metal and arched transversely so as to form a stiff, rigid member throughout its length.

In Figs. 1 and 3 it will be observed that the upper and lower longitudinal halves 5 and 6 respectively, are slightly inclined toward each other meeting at a median line 7 to form this transverse arch. The longitudinal edges 8 of the blade are still further inclined or curved with respect to the body of the blade so as to further increase the longitudinal stiffness of the same. The curved edges 8, however, are not of sufficient inclination to form a purchase for the lodging of ice and snow thereon when the blade is exposed to weather conditions. The entire blade is preferably coated with a highly polished enamel, and as shown in Fig. 1 the convex side of the blade receives the signal color 11. The blade is arranged for attachment to a support at its shank end 9, by having corrugations or sockets 10 formed therein, said corrugations extending longitudinally of the blade above and below the median line 7. Bolt holes 12 are suitably provided for attaching the shank of the blade to the support.

It will thus be observed that the present construction provides a blade of sheet metal which is sufficiently arched to give it the necessary stiffness and yet is without any corrugations or projections on its signaling side for catching ice and snow, and, furthermore, its arched construction has the additional function of presenting a convex face for signal-

ing, which diffuses rather than concentrates any reflected light. It is obvious that any rays of light reflected from the two surfaces 5 and 6 will be divergent and this diffusion of reflected light obviates any dazzling effect upon the eyes of the engineer so that the signal may be clearly seen at all times.

What we claim is:

1. A semaphore blade adapted for use in a substantially vertical plane, said blade being made of sheet metal formed throughout the greater portion of its length into a single arch transversely of its length, the convex side thereof having a smooth light-reflecting surface, a signal color on said convex surface for signaling the engineer and extending at least beyond the apex of the arch at the lower side thereof, whereby ice formed on the lower portion of the convex surface may be more readily dislodged and the light reflected from that portion of the surface at one side of the apex will be thrown in a different direction from the light reflected from the portion at the other side thereof, and means on said blade for attaching said blade to a signal support.

2. A semaphore blade adapted for use in a substantially vertical plane, said blade being made of a single sheet of sheet metal bent throughout the greater portion of its length into a single arch transversely of its length, the convex side thereof having a smooth enameled surface, a signal color on said convex surface for signaling the engineer and extending beyond the apex of the arch at both sides thereof, whereby ice formed on the lower portion of the convex surface may be more readily dislodged and the light reflected from that portion of the surface at one side of the apex will be thrown in a different direction from the light reflected from the portion at the other side thereof, and means at one end of said blade for attaching said blade to a signal support.

In testimony whereof, we have signed our names to this specification, in presence of two subscribing witnesses.

MELVIN LOUIS BLACKBURN.
WILLIAM AUGUSTUS STELLERS.

Witnesses:

J. H. HOPKINS,
W. G. McCLAIN.