

SIGNAL ROCKET—MARK I.

DESCRIPTION OF THE ROCKET.

The signal rocket is used at night for signaling purposes. It rises to a height of approximately 800 feet and bursts at the top of its trajectory, throwing out a star and parachute. The star gives off a red, green, or gold rain.

The rocket consists of:

(a) The rocket body (H), which contains the rocket fuse (P), the rocket charge (N), the rocket body top (M), the rocket body bottom (L), and the color fuse (A).

(b) The head (B) which contains the priming powder (G), the star (U), the parachute (F), and the packing (D).

(c) The rocket stick (R).

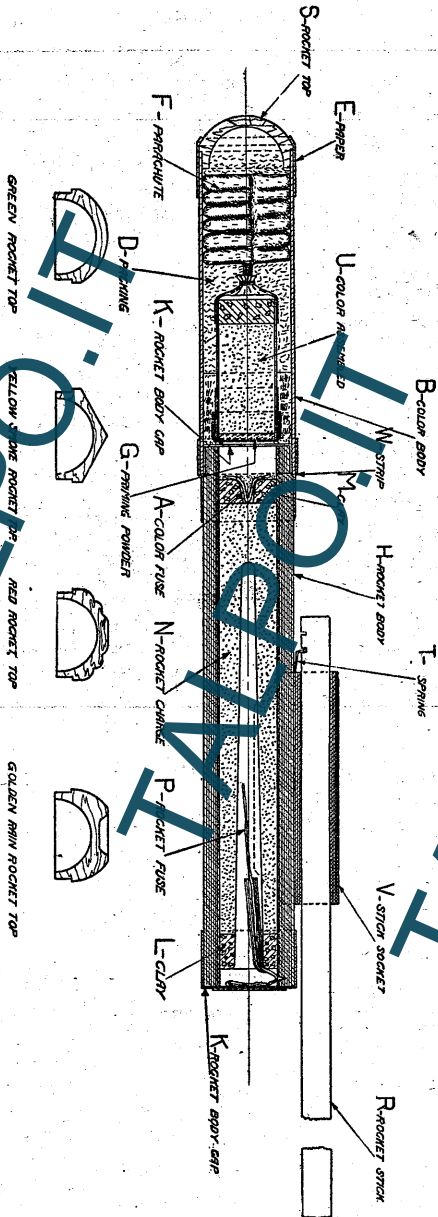
(a) THE ROCKET BODY (H).

The rocket body is a paper case $11\frac{1}{8}$ inches long, with an outside diameter of $1\frac{1}{8}$ inches and an inside diameter of $1\frac{1}{4}$ inches. The color rocket body top (M), with the color fuse (A), is inserted in the top of the body (H), to a distance of $\frac{1}{8}$ of an inch. The rocket charge (N) is inserted into the lower end of the body with the hollow part down so that the upper end of the charge rests against the top (M). The rocket body bottom (L) is placed over the lower end of the charge. The rocket fuse (P) is tacked to the side of the body (H). One end of the fuse is inserted into the hollow in the charge (N) and the other end left loose so that it will project from the body when the cap (K) is broken. The ends of the body are sealed by two linen rocket body caps (K).

(b) THE HEAD.

The head (B) is attached to the body (H) by a paper strip (W). The priming powder (G) is placed on top of the cap (D); the star (U) and parachute (F) are then inserted and suitably packed in sawdust. The rocket top (S) is inserted into the head and fastened to it by the paper strip (E).

As is shown in the plate the shape of the rocket top is distinctive for each rocket according as it gives off a red, green, or gold rain. The head of the rocket is painted the color given off by the star.



SIGNAL ROCKETS.

Nomenclature.

Sym- bol.	Quan- tity.	Name.	Material.	Location and purpose.
A	1	Color head	Powder	Contained in top (M). Lights priming powder (G).
B	1	Head	Paper	Attached to body (H). Contains star (U) and parachute (F).
C	6	Matches		Carried in wrapper. Used for lighting fuse (P).
D		Packing	Sawdust	Packed loosely around star (U) and parachute (F).
E		Paper strip	Paper	Fastens top (S) to head (B).
F		Parachute	Japanese paper	Contained in head (B). Holds star (U) in air.
G	1	Priming powder	Powder	Between top (M) and star (U). Expels star (U) and parachute (F) from the head (B).
H	1	Rocket body	Paper	Contains fuse (P), top (M) and bottom (L).
K	2	Rocket body caps	Linen	Fastened over ends of body (H).
L	1	Rocket body bottom	Clay	Hold rocket charge (N) in place.
M	1	Rocket body top	do	Do.
N	1	Rocket charge	Powder	Contained in body (H). Propels rocket.
P	1	Rocket fuse		Attached to body (H). Lights charge (N).
R	1	Rocket stick	Wood	Attached to socket (V). Stadies rocket.
S	1	Rocket top	do	Plugs end of head (B).
T	1	Spring	Steel	Between body (H) and socket (V). Holds stick (R) in place.
U	1	Star	Chemicals	In head (B). Gives off red, green, or gold rain.
V	1	Stick socket	Paper	Attached to body (H). Holds stick (R).
W	1	Strip	do	Fastens head (B) to body (H).