

S. CLARK.

Marine Kite.

Patented Nov. 9, 1869.

No. 96,550.

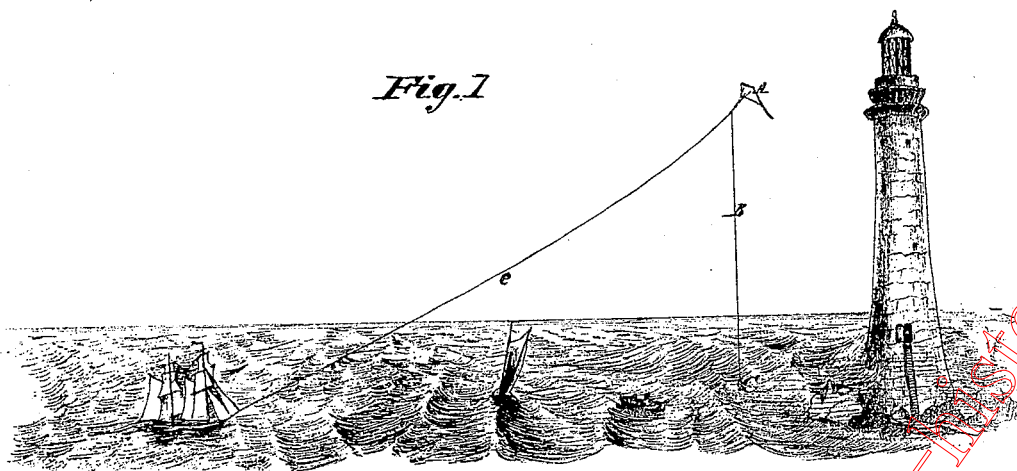


Fig. 1

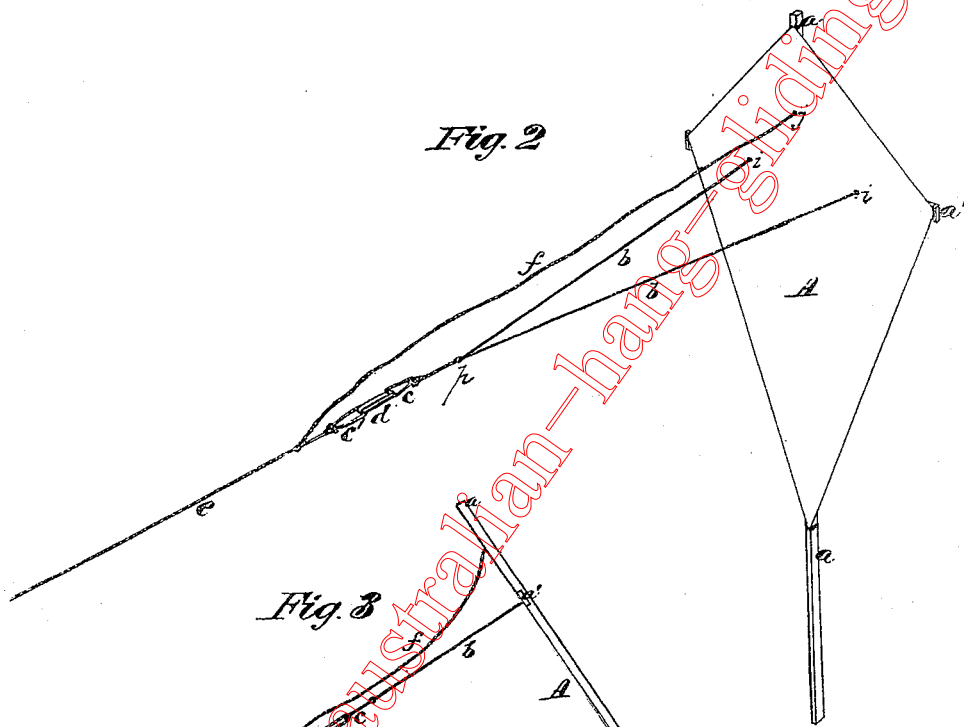


Fig. 2

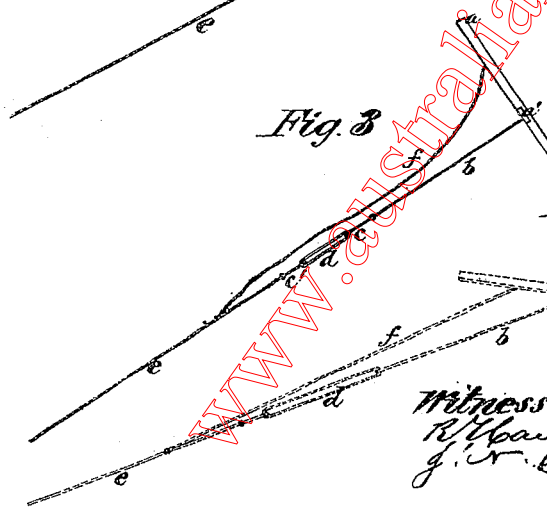


Fig. 3

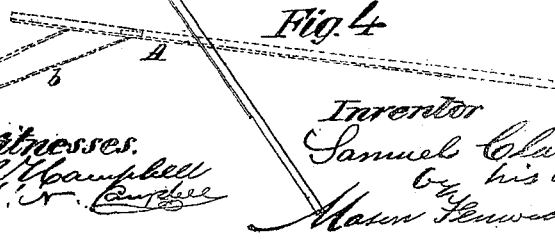


Fig. 4

Witnesses:  
 R. Campbell  
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# United States Patent Office.

SAMUEL CLARK, OF NEW YORK, N. Y.

Letters Patent No. 96,550, dated November 9, 1869.

## IMPROVEMENT IN KITES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SAMUEL CLARK, of New York city, in the county of New York, and State of New York, have invented a new and improved Kite; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a picture representing my improved kite, sent off from a vessel, for the purpose of communicating with persons stationed at a light-house.

Figure 2 is a perspective view of the kite, showing clearly the manner of attaching the cords to it.

Figures 3 and 4 show the kite in two different positions.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement on kites which are designed for affording communication between persons on vessels at sea, or between a vessel and the land, or between two points of land which are otherwise inaccessible, and which are also adapted for signal-purposes.

The object of my invention is to attach a kite to its check-line, in such a manner that the kite will present different angles to the wind, according to the violence or force thereof, so that all danger of destroying the kite, or breaking the check-line, will be avoided, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

To each side of the longitudinal centre of the kite A, a cord, *b*, is attached, at *i*, which cords are of equal length, and are united at *p*, and secured to a short cord, to which a metallic loop, *c*, is attached, as shown in figs. 2 and 3 and 4.

Between the loop *c* and a metallic loop, *c'*, which is attached to the check-line *e*, is an India-rubber or other suitable spring, *d*, of the required length and strength to hold the kite in proper position, under ordinary pressures of wind against it.

To the central kite-stick *a*, and at a point, *j*, above the horizontal plane of the points of attachment of the cord or cords *i*, a line, *f*, is attached at one end, the opposite end of which is attached to the check-line, as shown in figs. 2 and 3.

During an ordinary wind, when there would be no danger of breaking the check-line *e*, the line *f* will be slack, and the kite will assume an angle, with respect to the check-line *e*, about as represented in figs. 2 and 3.

Should the wind increase in violence, the pressure upon that portion of the kite which is below the plane of the attachments of cord or cords *b* to the kite, will cause the kite to assume an angle represented by dotted lines in fig. 4, in which position the

spring will be stretched so as to make the line *f* taut.

Thus, it will be seen, that should there arise such a strong wind as would be liable to part the check-line *e*, the spring *d* and line *f* will allow the kite to assume such an angle, with respect to the direction of the wind, as would greatly modify the pressure against it.

Attached to the check-line *e*, at a suitable point, is a line, B, which has a load, C, on its lower end, of sufficient weight to prevent the kite from rising higher than the length of said line B, and also to keep the lower end of this line B in a position where it can be reached by persons with whom it is desired to communicate, either upon land or at sea.

The following are some of the uses and advantages attending my invention:

The kite affords an easy and safe means for communicating between vessels in boisterous weather, or when it would be difficult or dangerous to use a boat.

It affords a means of communicating with the shore, in case of shipwreck, or for sending a line ashore, or a grapnel or anchor, when floated upon a raft or boat, for propelling a floating object before the wind, bringing a vessel end to the sea or gale, when it would be difficult or impossible to use a sail.

It can be used as a signal of distress, or to hoist one, and also for other signals.

By attaching a light float to the check-line B, it can be made to traverse the ocean or water for hundreds of miles, as a signal of distress, or other signals, or as long as there shall be sufficient wind to buoy it up.

In case a vessel is in danger of being driven on a lee shore, it can be sent ashore, with particulars of the fact, and thus, in many cases, enable assistance to be obtained.

It can be used for communicating or transferring a line across ravines, rivers, and places where it would be otherwise difficult or impossible to do so.

Having described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. So attaching a kite to its check-line *e*, that the kite will present different angles to the currents of wind, according to the force of the wind, substantially as described.

2. A spring, *d*, or its equivalent, interposed between the check-line *e* and the kite A, in combination with a line, *f*, or its equivalent, substantially as described.

3. The combination of the line B with a kite, which is constructed substantially as described.

SAMUEL CLARK.

Witnesses:

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