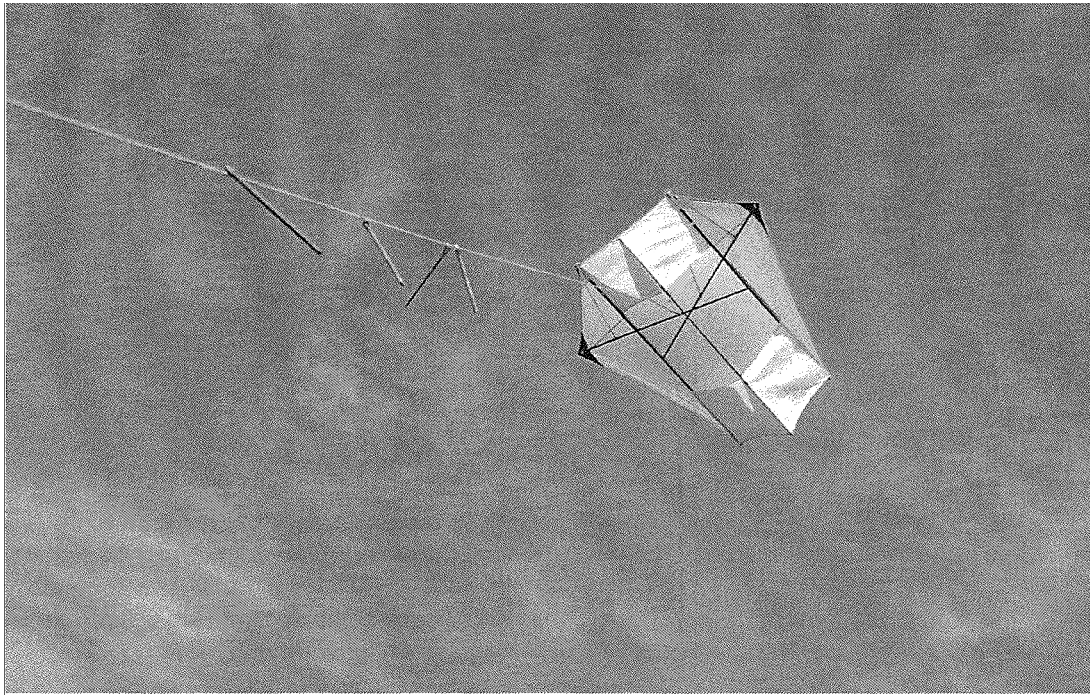


Wheelwright

Mechanical Kite Launcher

Jan Westerink

(translated from the French by John Dobson)



A little parcel received through the post

To be quite honest, I have to admit I was scared. The parcel had spent some time in the corner of the room because I was away. I had bought it through an auction site on the internet, but I did not know what was in it. I knew the bits that it ought to contain, but this...

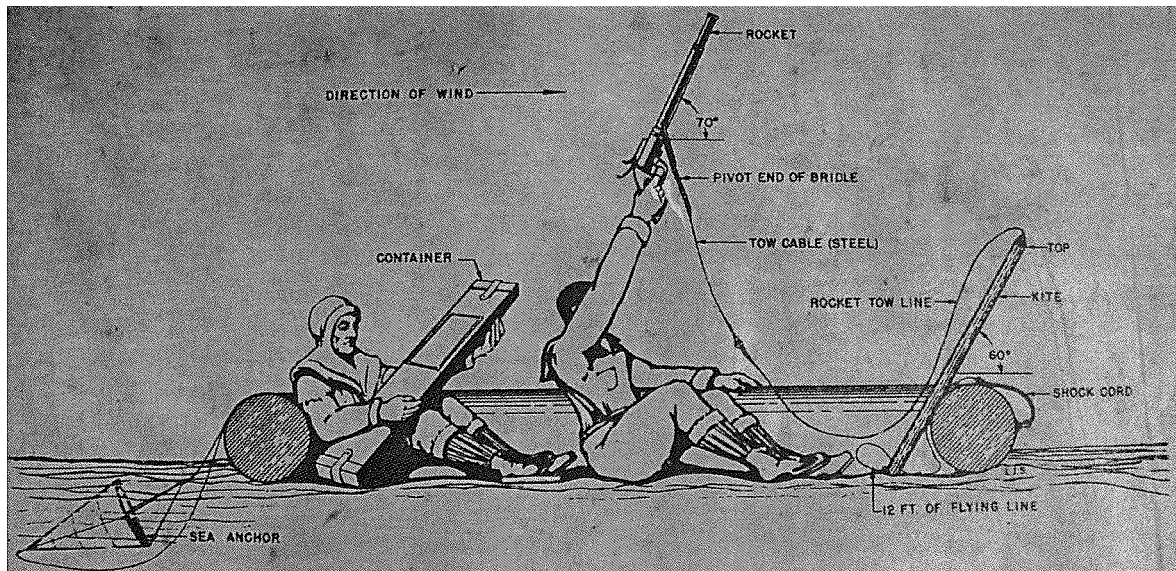
Instinctively I glanced at the thermometer which hung on the wall. Although it didn't work, it said 28 degrees. One of the five hottest summers since 1902. In my hand I held a rocket, what's more a charged rocket, and a metal tube holding powder, dated 1942. A war piece. In the box, formerly bright yellow but now quite discoloured, there were two more of them. For the shot, it seemed a single mechanism had been used, as if someone had tried just once. How I would have liked to talk to him and ask him what happened. I continued to unpack the box, carefully, and I discovered three kites and two more rockets, some firing caps (Winchester 24) and a heavy launching pistol.

It was hard to believe that all this had come to the Netherlands by post from the USA by air and delivered in his small van by the postman, whom I knew personally — “Dad, the man is here again with a kite for you”. It had passed Customs easily, nothing special. Fortunately, no one had paid any attention to it at border control.

A mechanical kite launcher

The kite patented by Wheelwright which is launched is a folding kite rather like a Conyne, together with a launching pistol and a line as patented by Schermuly¹. This constitutes the lower end of a kite launcher for allied World War 2 pilots in difficulty on board a small inflatable dinghy. The system is designed rather like the famous Gibson Girl, the small elegant folding yellow box kite to send into the sky an antenna sending out a distress signal.

¹ see <http://www.cyber-heritage.co.uk/Schermuly> for some interesting details about the inventor and his mechanism – *translator*

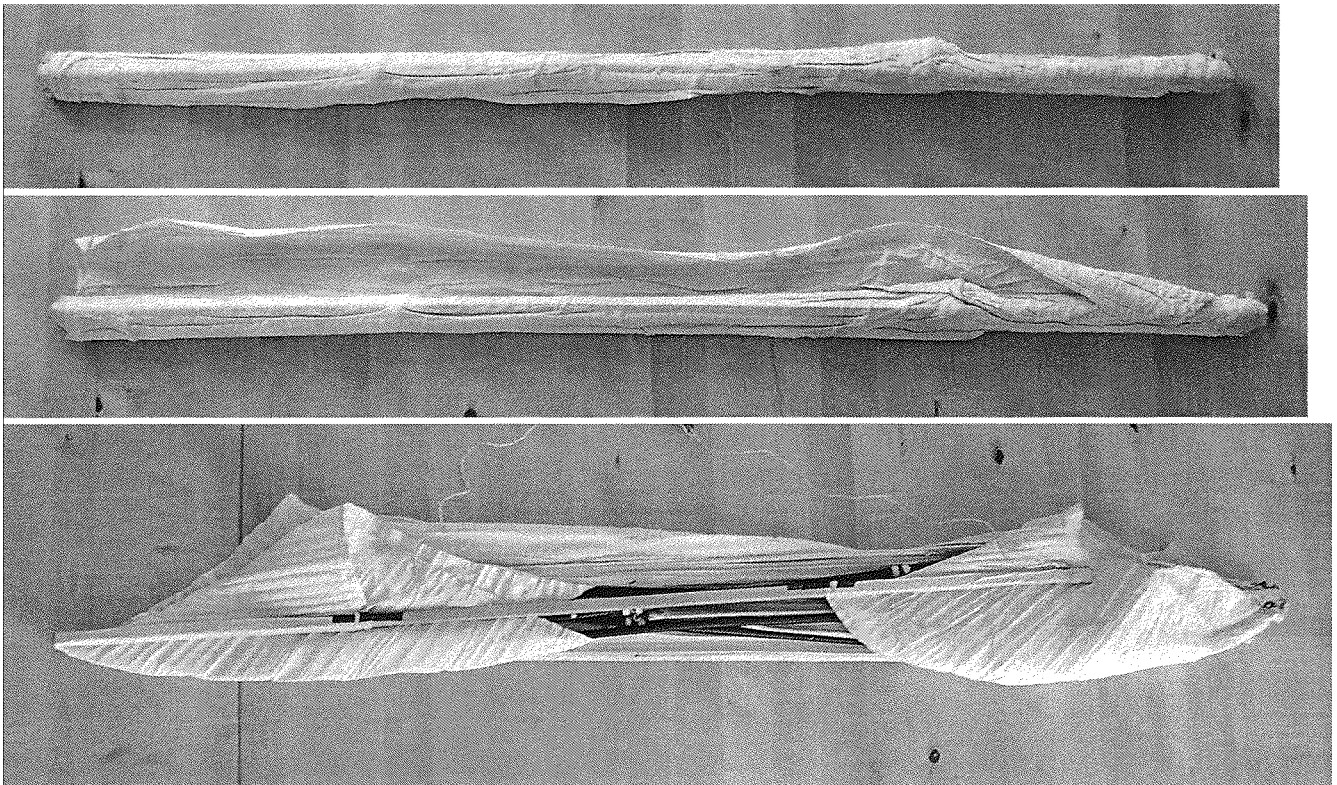


Instructions inscribed on the box of my Wheelwright

Why kites should be propelled, with all the attendant risks, and not simply released from the lifeboat into the wind, is still a mystery to me. Perhaps I have become more simple after trying it out for a day. The box which the seaman should carry in his boat is heavy enough, but nevertheless carries three complete launchers. The Gibson Girl is obviously smaller and lighter but contains only a single kite.

Handling the historical material

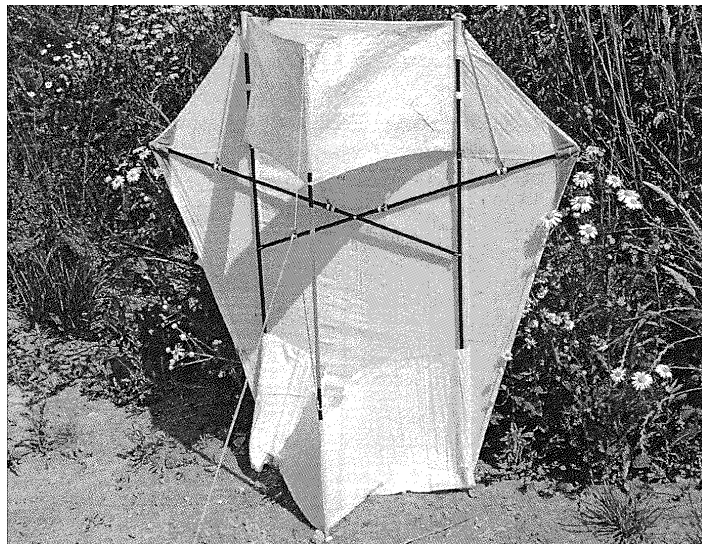
It is certainly very exciting on unwrapping a parcel to find a kite wrapped in the factory up to 100 years old which has been tightly rolled up and dried out and so become very fragile. But that is certainly the case here and it requires very responsible handling. Often the material is old and has become porous. In general it is very difficult to put it back in its wrapping after examination. Careless unwrapping risks losing information. In this case, the information that might be lost could provide the method to be followed in folding the kite so that it would open automatically after it has been shot into the air.



The secret unveiled

It is clear that I had here a single used kite (it had been crudely rolled up and the rocket, which is empty, had been discoloured by heat; the kite's head still carried traces of sand and grass coming from its hitting the ground) and two unused kites almost 70 years old. However, the unpacking of the used kite was performed with all the necessary care. The two unused kites were still in their original factory wrapping, and ready in their bags to be launched. I again went back to the first kite and studied how it worked. Next time, when I have time and help available, I would carefully open one of the new mechanisms (1st phase) and record all the stages on video and photo, so that one could reconstruct the use of it all and even perhaps try to test its workings (2nd phase). I haven't enough time at present to try out the rockets. It might be possible to try a real shooting with a modern line launcher (3rd phase).

The Kite



The fully opened kite

The kite is not unknown to me. One of my friends, Ulli Draheim, has one larger than the one I now have in my hands. Ulli is an expert in the area of kite rescue. He has an enormous collection of Gibson Girls with all possible accessories. Ulli's kite is the only other Wheelwright which I have so far seen. The reader will readily understand that I would particularly love to get in contact with anyone who knows more about the system or has even made it work!

Ulli's kite is larger and has a framework all of aluminium. Mine has a wooden crosspiece in its framework and the sliding opening mechanism operates in a different way. Why was the arrangement changed, why two versions, why ...? These questions vex me! As the kite still seems intact, I have made a small film which clearly demonstrates its workings. It can be seen on the website www.firstkits.nl and on YouTube (see the references at the end of this article). What is splendid is that the kite is still intact after all these years, and it has a tale to tell about the single launch, successful or failed, and whether it was used only for amusement.

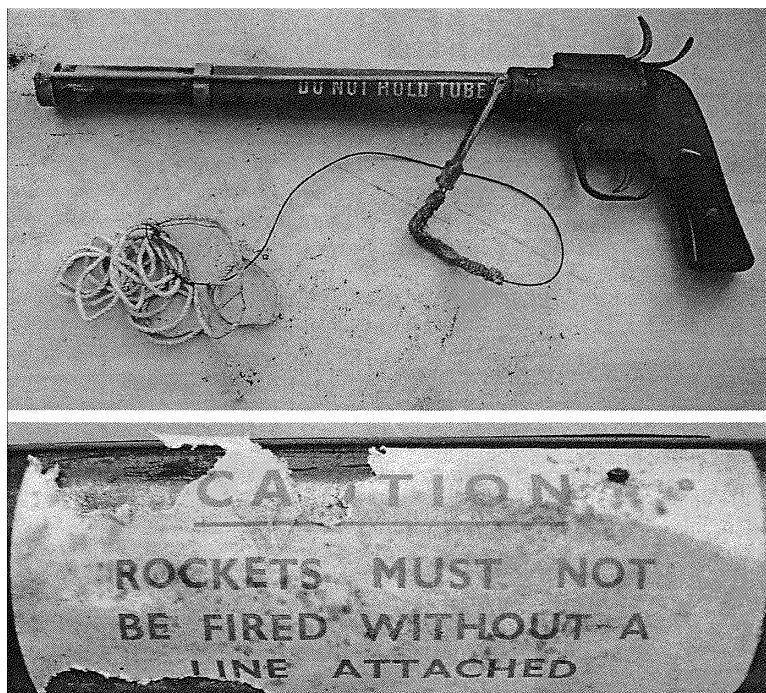


Ulli Draheim (Germany) and his big Wheelwright

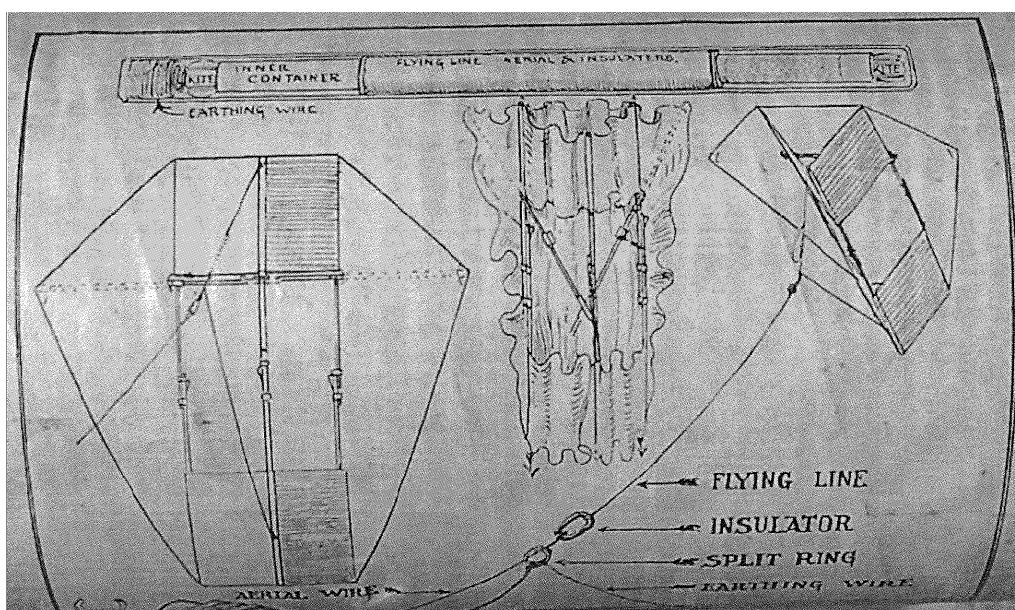
The kite is still in good condition and there are still two that are unwrapped. It might therefore be tested, very carefully. In a slight to moderate breeze, the Wheelwright rises with difficulty. Unlike the Gibson Girls, no adjustments can be made on this kite. But it flies, although it has a tendency to veer to the right. Later, it will be necessary to try it again in a strong wind. The view in the sky of the crosspieces at the top of the line is unique. These crosspieces allow the opening of the cover which the kite deploys when, carried aloft by the rocket, it reaches its highest point. It is a pity that we are so ignorant of the use of the kite and of other rescue models in practice. This also calls for more experimentation and research. Action research: the best there is.

The shooting mechanism

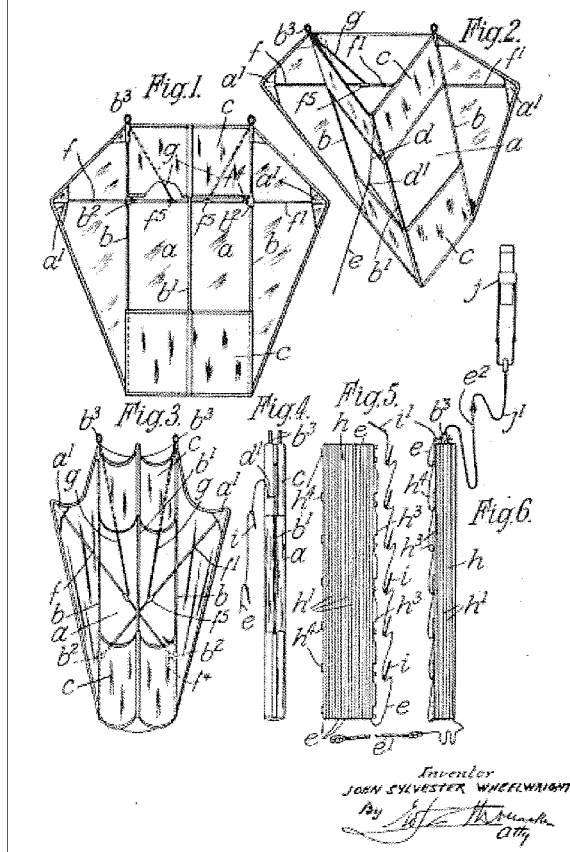
In truth this is nothing more than a line launching pistol with a rocket. It was carefully taken out of the box and photographed without having been cleaned up. What an apparatus! And I think again of the Customs, the aeroplane and the faithful postman...



The launching pistol



Instructions on the tube (not the box) of Ulli's kite



Wheelwright's patent design

References

video of the kite <http://www.youtube.com/watch?v=LiNsRZhLohA>

original author's website: <http://www.firstkites.nl>

original author's YouTube videos: <http://www.youtube.com/user/firstkites>

Patents

CA 422,725 (1944) and US 2,386,762 (1945)

Wheelwright kite GB 32,7369 (1929)

This article was first published (in French, translated from the original Dutch) in NCB 153 (the magazine of Nouveau Cervoliste Belge), July-September 2010, and is republished with permission. I am grateful to Nest Lernout for providing some corrections to my first version of the translation.

Afterword

This article was brought to my attention by George Webster, who writes

At Dieppe last year, I was fortunate to be given a good run of spare copies of NCB magazine by the editor—and old friend of British Kiteflying—Nest Lernout. As it happens I had already bought issue 153 which contains the article about the Wheelwright kite. Readers who have never seen one of these kites might not understand from the article that the procedure was to fire a tube containing the collapsed kite from which the cover was stripped away as the kite fully extended the launch line. The kite then spread open in a scissors motion caused by two springs attached to the verticals.

Jan Westerink has the first launch artillery known to me; I'm sure that by now he has made contact with Paul Chapman, who has photos of David Robinson's kite and one of mine. Clearly, several versions were made. David's seems to be a prototype. Mine have a wooden leading spar to the Conyne section. Perhaps Paul might be able to pull some threads together? One of mine is flown occasionally and is stable but clearly designed for 'sea breezes'.

While I've heard of comic moments in tests (reaction to the shot causing the dinghy to fold up, premature firing blowing a hole in it), I've no information about whether the system was ever used.