

P. LICHT.
Improvement in Rockets.

No. 133,234.

Patented Nov. 19, 1872.

Fig. 1.

Fig. 4.

Fig. 3.

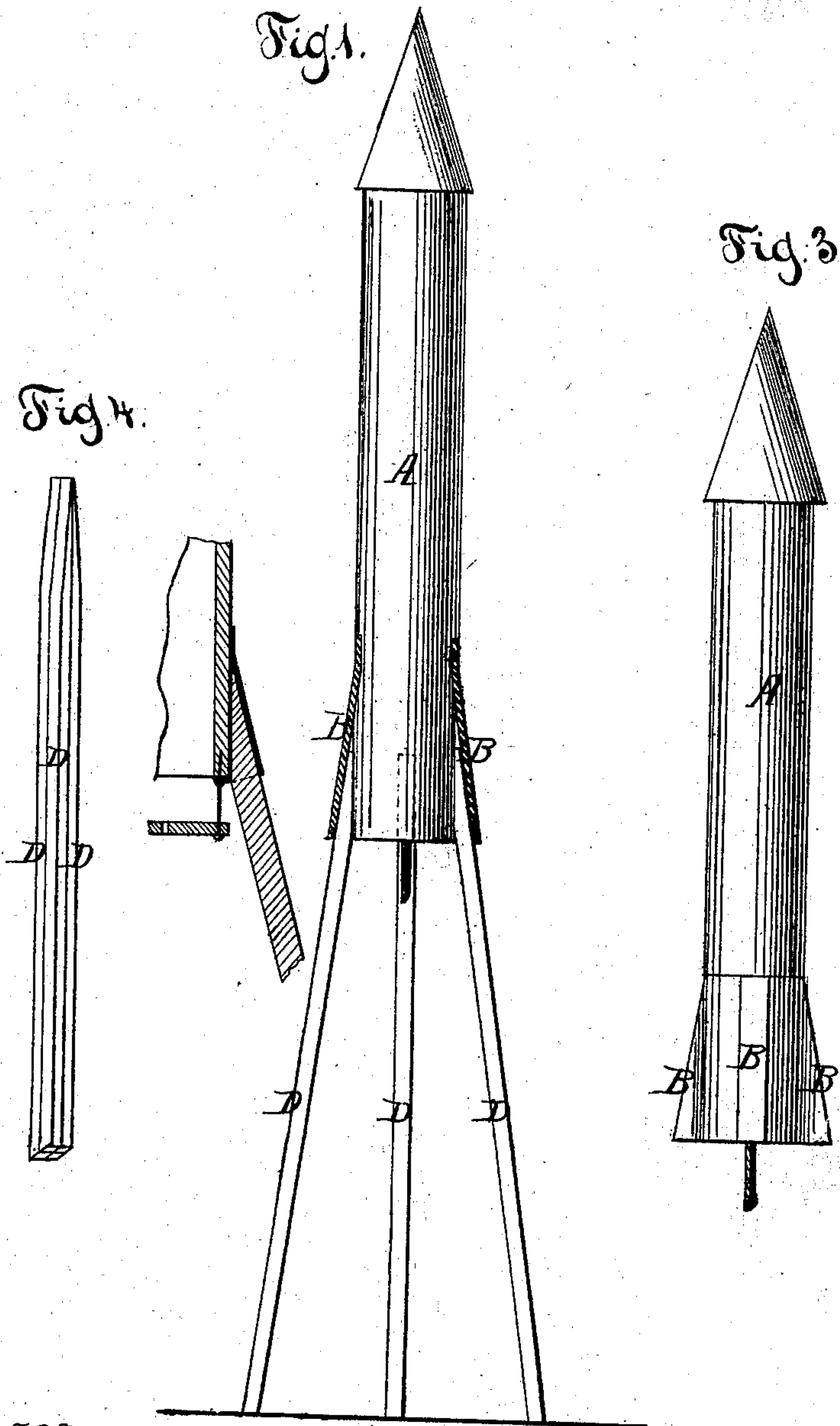


Fig. 2.

Inventor.

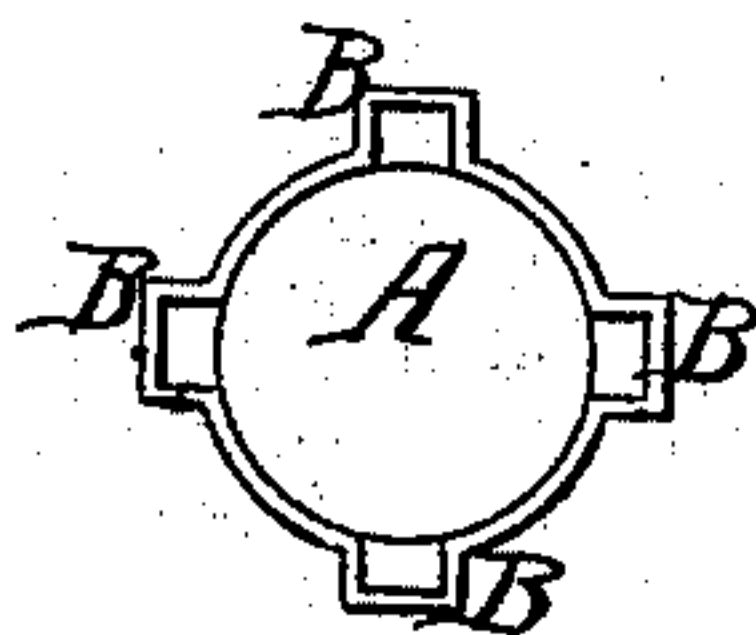
Phillipp Licht

By *Wm. S. Woodward & Son*
Attorneys

Witnesses.

C. W. Kellers.

Ernst Billmeyer.



UNITED STATES PATENT OFFICE.

PHILLIPP LICHT, OF EAST WILLIAMSBURG, NEW YORK.

IMPROVEMENT IN ROCKETS.

Specification forming part of Letters Patent No. 133,234, dated November 19, 1872.

To all whom it may concern:

Be it known that I, PHILLIPP LICHT, of East Williamsburg, in the county of Queens and State of New York, have invented a new and useful Improvement in Rockets; and I do hereby declare the following to be a full, clear, and exact description, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 is an elevation of a rocket constructed according to my invention, the sticks being shown connected with the rocket so as to support it in readiness to be fired off. Fig. 2 is the base-end view of the body of the rocket. Fig. 3 shows the body of the rocket detached; and Fig. 4 shows the sticks detached ready to be packed.

Similar letters indicate corresponding parts.

This invention relates to sky-rockets; and consists in constructing and arranging the body of the rocket and the supporting-sticks so that they are separated and detached from each other, and can be packed in that condition, making the package only of the length of the body of the rockets of their sticks, respectively, instead of their combined length, as in rockets as heretofore prepared for market.

My invention diminishes the exposure to injury by decreasing the length of the package, and diminishes the difficulty of transportation.

The body of the rocket at the base is provided with sockets to receive the detachable sticks, outer faces of the sockets being inclined at an angle with the axis of the rocket, and the inner faces of the sticks at the ends which enter the sockets being made with a corresponding angle, so that when the sticks are inserted in the sockets their supporting ends diverge and thereby widen the area of support.

The letter A designates the body of a rocket, and B are sockets, four in number in this case, arranged around the center of the rocket

at its base end to receive supporting-sticks D, which are inserted in the rockets when the rocket is to be fired. The sockets are beveled, as are also the upper ends of the sticks, at one side, in such a manner that when the sticks are inserted their lower end will diverge, as shown in Fig. 1. The sockets are concealed from view and confined upon the lower end of the body of the rocket by paper or other fabric; and, as an additional security against displacement, they will in some instances be confined by glue or tacking, as shown in section in Fig. 4. The outside surface of the sockets being inclined from the top to the bottom, and the upper edge being almost flush with the body of the rocket, the passage of the rocket when fired will not be so much impeded by the action of the air as would be the case in such where lugs or wire rings were employed. By making the sockets with inclined outer faces and of considerable length, as shown, thus securing triangular-shaped seats for the beveled ends of the sticks, the said sticks can be removed or replaced with ease and facility, and at the same time, by embracing the sides and edges of the sticks, as shown, all slipping or lateral motion will be prevented, which results could not be secured if a wire were used in connection with the sticks.

The construction thus given to the sticks and to the sockets will, when the sticks are inserted in their cone-shaped seats, support the rocket in a firm, substantial manner, due to the fact that the supporting ends of the sticks diverge, thus enlarging the area of support.

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

The series of sockets B, formed with inclined outer faces and confined upon the body of the rocket, as described, to create triangular-shaped seats for the beveled edges of the sticks D, as herein shown, for the purpose specified.

PHILLIPP LICHT.

Witnesses:

JOHN LICHT,
E. F. KASTENHUBER.