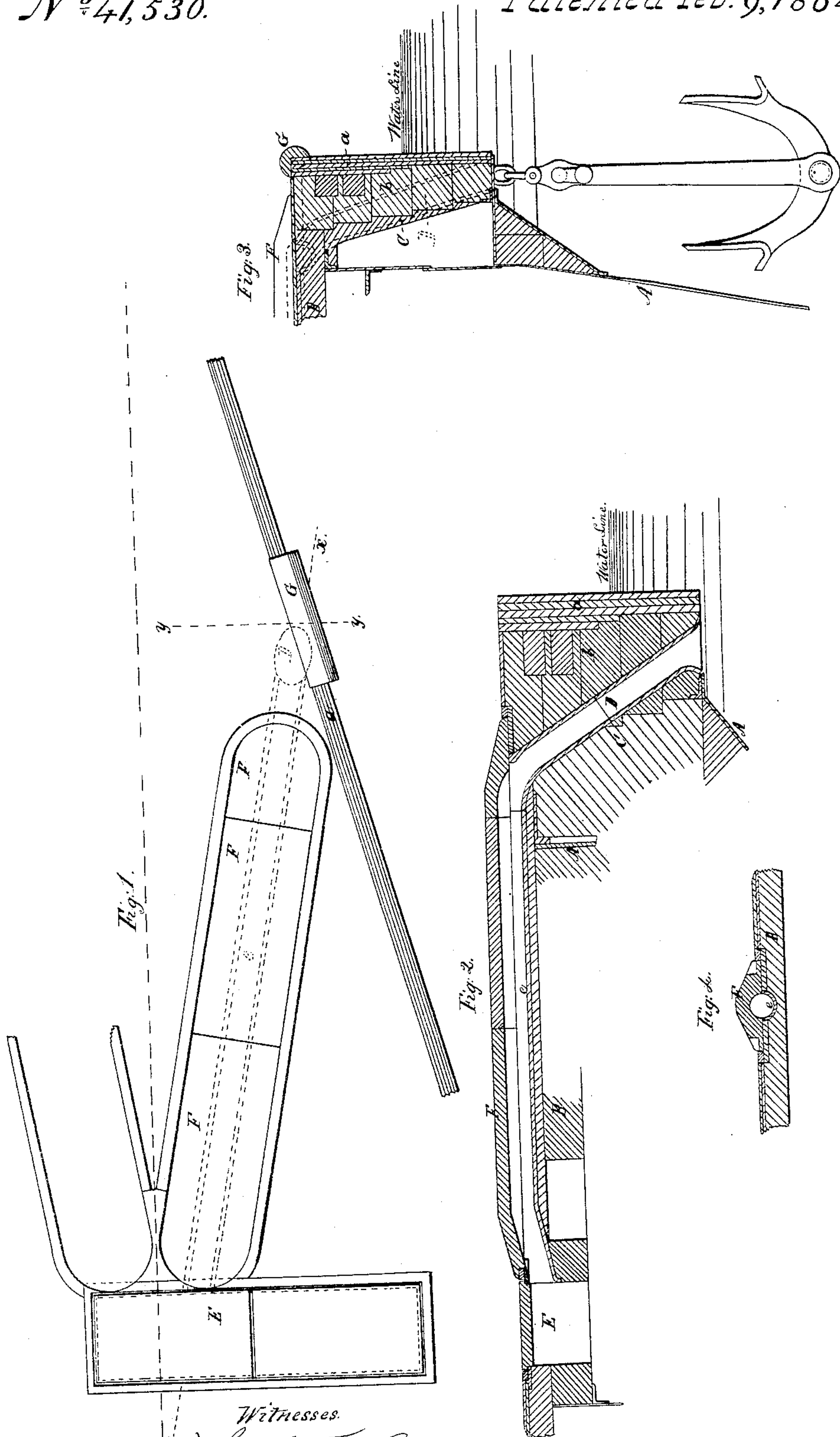


I. Newton.

Protecting Cables in Iron Clads.

N<sup>o</sup> 41,530.

Patented Feb. 9, 1864.



Witnesses.

*Wm. H. Douglas*  
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Inventor.

*Obadiah Newton*

# UNITED STATES PATENT OFFICE.

ISAAC NEWTON, OF NEW YORK, N. Y.

## IMPROVED MEANS FOR THE PROTECTION OF THE ANCHOR-CABLES OF IRON-CLAD VESSELS.

Specification forming part of Letters Patent No. **41,530**, dated February 9, 1864; antedated January 11, 1864.

*To all whom it may concern:*

Be it known that I, ISAAC NEWTON, of the city, county, and State of New York, have invented a new and Improved Mode of Protecting the Anchor-Cables in Iron-Clad Vessels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan of a portion of the deck and one side of the bow of a vessel of the "monitor" class, illustrating my invention. Fig. 2 is a vertical section in the line *x x* of Fig. 1. Fig. 3 is a vertical section in the line *y y* of Fig. 1. Fig. 4 is a transverse section of the protecting hood and a portion of the deck to which it is attached.

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

Circumstances may often arise when it is absolutely necessary for an iron-clad vessel to anchor under an enemy's fire, and in such case it is of course essential that the cable to which the anchor is attached should be protected from shot. This protection is now obtained in the iron-clads of the monitor class already built by an anchor-well; but that device is incompatible with the rate of speed now required for iron-clads.

My invention consists in constructing a hawse-hole in the armor-shelf or through the wooden backing placed behind the iron armor in such manner that it emerges below the water-line.

It also consists in protecting the cable between the point where it comes out of the upper end of the hawse-hole behind the armor and the place where it passes below the deck to the anchor-hoisting apparatus by means of an iron hood securely fastened to the deck. This latter protection is only required when the upper end of the hawse-hole is above the deck of the vessel.

To enable others skilled in the art to apply my invention, I will proceed to describe it with reference to the drawings.

A is the hull of the vessel, B the deck, and

C the armor shelf. *a* is the armor, and *b* the wooden backing.

D is the hawse-hole running through the armor-shelf behind the armor and through the wooden backing and emerging below the water-line, its direction being such as to allow the cable to pass in the most advantageous manner.

E is the hatchway or opening through which the cable passes from the deck to the hoisting apparatus below, and *e* is a channel formed in the upper surface of the deck, between the said opening E and the upper opening of the hawse-hole, for the passage of the cable. This channel is lined with iron.

F is the hood for protecting the portion of the cable between the opening E and the hawse-hole, made of wrought iron, with flanges through which it is bolted or otherwise secured to the deck, and made in sections which are movable when the vessel is not under fire.

G is an iron chock or chafing-piece, secured to the edge of the armor-shelf in such position relatively to the channel F that the cable may pass over it when the vessel is not under fire, instead of through the hawse-hole, the said chock or chafing-piece being to prevent abrasion of the side of the vessel when the cable passes over the exterior.

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

1. Constructing or arranging the hawse-hole of an iron-clad vessel within the armor-shelf, or behind the armor and within the wooden backing thereof, in such manner that it emerges below the water-line, substantially as herein specified.

2. The iron hood F, for protecting the cable where it passes over the deck between the upper end of the hawse-hole, the place where it passes through the deck to and from a hoisting apparatus below the deck, substantially as herein specified.

ISAAC NEWTON.

Witnesses:

THOS. S. J. DOUGLAS,  
GEO. W. REED.