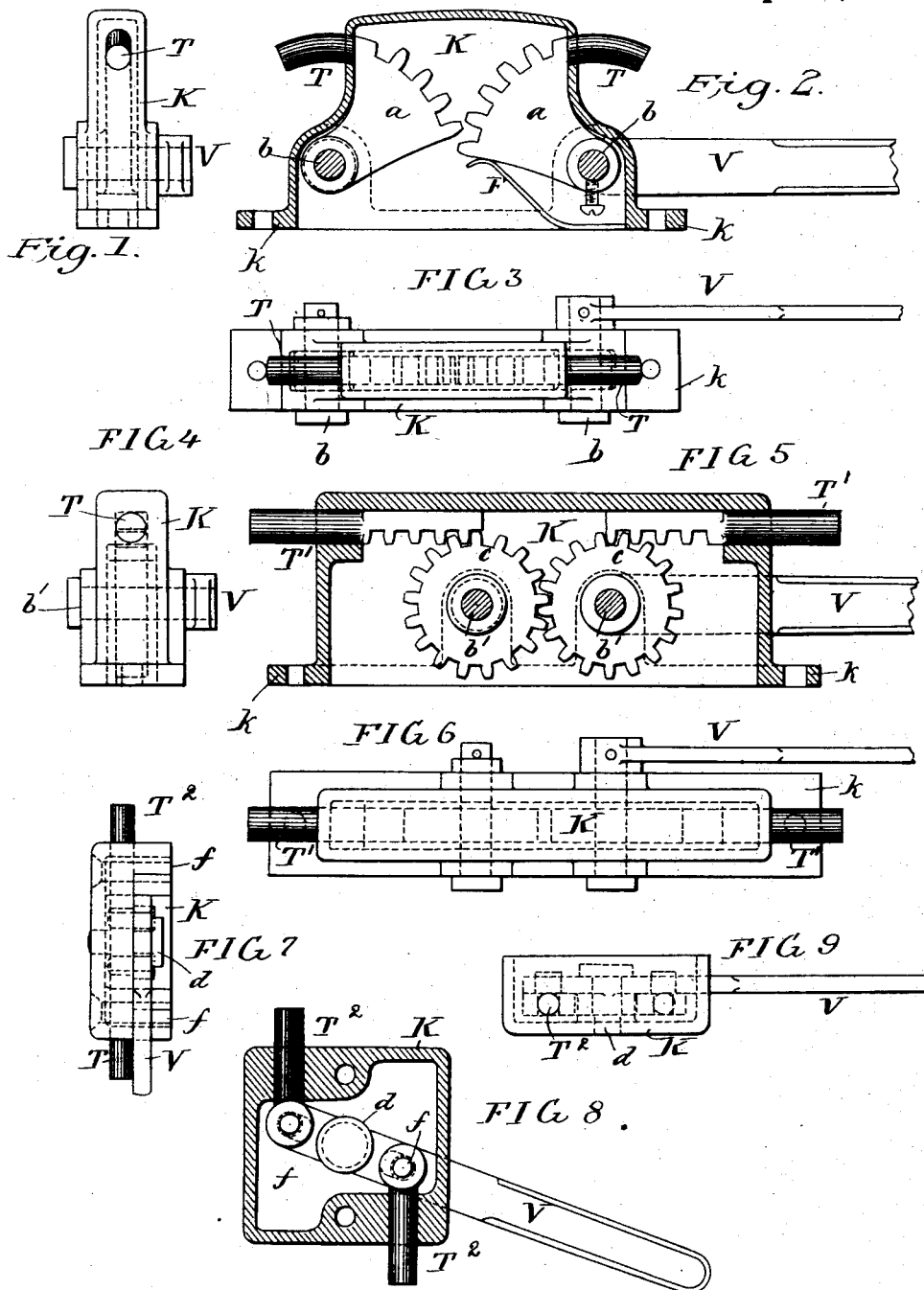


(No Model.)

A. V. T. SABROE.  
RELEASING CLEAT OR BELAYING PIN.

No. 525,624.

Patented Sept. 4, 1894.



Witnesses  
*Chas. Morgan*  
*Jos. S. Lockwood*

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# UNITED STATES PATENT OFFICE.

AXEL VILHELM THEODOR SABROE, OF HADERSLEV, GERMANY.

## RELEASING-CLEAT OR BELAYING-PIN.

SPECIFICATION forming part of Letters Patent No. 525,624, dated September 4, 1894.

Application filed November 10, 1893. Serial No. 490,528. (No model.)

*To all whom it may concern:*

Be it known that I, AXEL VILHELM THEODOR SABROE, a subject of the King of Prussia, residing at Haderslev, in the Kingdom of Prussia, Germany, have invented a certain new and useful Improved Releasing-Cleat or Belaying-Pin, of which the following is a specification.

My invention consists essentially of prongs projecting in opposite directions from a block suitable for belaying ropes or cords thereon, as the sheet holding ropes in a sailing vessel, and having means for instantly withdrawing the prongs within the block for casting off the ropes easily and quickly also when required, all as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1, is an end elevation of my improved cord holding and detaching apparatus in which the rope holding prongs consist of curved extensions of toothed sectors gearing with each other so as to work in unison and one by the other. Fig. 2, is a longitudinal sectional elevation of the apparatus. Fig. 3, is a plan view. Fig. 4, is an end elevation of the apparatus in which the prongs are extensions of reciprocating toothed racks gearing with toothed wheels for working them. Fig. 5, is a longitudinal sectional elevation of the apparatus of Fig. 4. Fig. 6, is a plan view of said apparatus of Fig. 4. Fig. 7, is an end elevation of the apparatus in which the prongs are jointed to a lever at opposite sides of its fulcrum pivot for being reciprocated. Fig. 8, is a longitudinal sectional elevation of the apparatus of Fig. 7, and Fig. 9, is a plan view of said apparatus of Fig. 7.

K represents a hollow block or case which may be of any approved form, as indicated by the three different forms in which I have represented it in the drawings, said block or case having a suitable base flange *k*, by which to bolt it down securely on the deck or other part of a vessel or other support.

T, T' and T<sup>2</sup> represent rope or cord holding prongs projecting out of the opposite ends of the said block or case suitable for belaying

the sheet holding cords on the said projecting prongs, or one of them as may be when the pull of the cord is backward over the blocks.

V represents a lever for withdrawing said prongs within the block or case so as to cast off the cords quickly when required. The prongs may be variously constructed and arranged, and have various applications of the lever for working them.

In Figs. 1, 2 and 3 they consist of curved projections of the toothed sectors *a*, mounted on pivots *b*, to one of which pivots the lever V is attached, with a spring F applied to one of the sectors so as to assist in maintaining the prongs in the working position, the rest of this duty being effected by the gravitating action of the lever.

In Figs. 4, 5 and 6 the prongs T' are straight sliding bars toothed inside of the block or case and geared with toothed wheels *c*, which are geared together and to the axis of one of which the lever V is attached for working them. In Figs. 7, 8 and 9 the lever V is fixed on a pivot *d*, located centrally between the longitudinal centers of the prongs T<sup>2</sup>, and the prongs are pivoted to said lever at *f*, on opposite sides of the fulcrum pivot *d*, so that the prongs are thrust out or in together according as the lever is shifted one way or the other.

It will be seen that the hollow block or case containing the devices connecting the prongs with the operating lever protects the devices from clogging with ice and snow in cold weather, and prevents accidental clogging by ropes and other objects liable to be dropped into or upon the working parts.

I claim—

1. The improvement in releasing cleats or belaying pins consisting of the hollow block or case, prongs projecting from opposite sides and in opposite directions suitable for belaying cords thereon, and adapted to be retired within the case for casting off the cords, and coupling devices inside of said case connecting said prongs with the lever for actuating them substantially as described.

2. The improvement in releasing cleats or  
belaying pins consisting of prongs projecting  
in opposite directions from a block or case  
suitable for belaying cords thereon, and  
5 means for instantly withdrawing the prongs  
and casting the cords off the ends of the  
prongs, consisting of the toothed sectors hav-  
ing the prongs attached to them and geared

together, and one of said sectors having a le-  
ver attached substantially as described. 10

Signed at Copenhagen, in the Kingdom of  
Denmark, this 1st day of July, in the year 1893.

AXEL VILHELM THEODOR SABROE.

Witnesses:

CARL GEORG ANDERSEN,  
CHRISTIAN LARSEN.