No. 879,360. PATENTED FEB. 18, 1908.

C. M. BROADY.

ARTIFICIAL HAND.

APPLICATION FILED SEPT. 9, 1907.

Fig. 1.

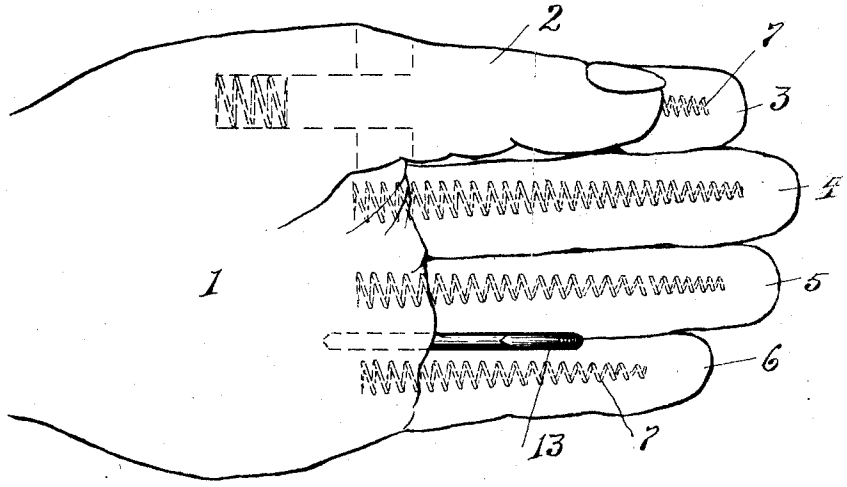
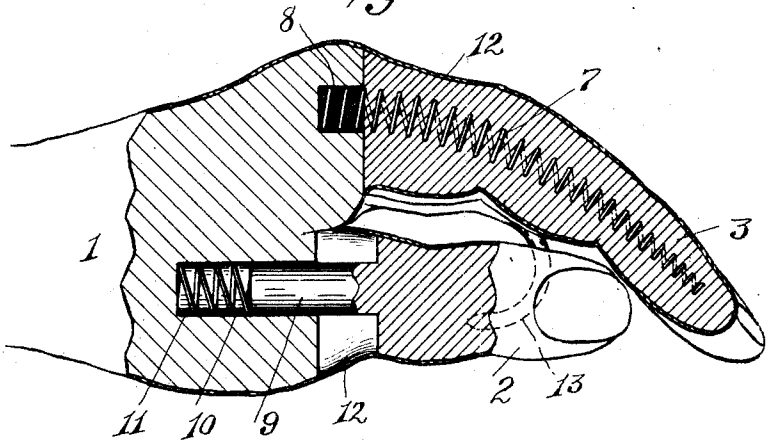



Fig. 2.




Witnesses:
George Oltsch
G. M. Cole.

Claude M. Broady
Inventor
By W. C. Thomas & Co
Attys.

# UNITED STATES PATENT OFFICE.

CLAUDE M. BROADY, OF SOUTH BEND, INDIANA.

## ARTIFICIAL HAND.

No. 879,360. Specification of Letters Patent. Patented Feb. 18, 1908.

Application filed September 9, 1907. Serial No. 392,010.

*To all whom it may concern:*

Be it known that CLAUDE M. BROADY, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, has invented certain new and useful Improvements in Artificial Hands, of which the following is a specification.

My invention relates to improvements in artificial hands, an object of the invention being to provide an artificial hand of extremely simple construction, which will resemble the human hand in general appearance and which can be readily manipulated to perform many of the functions of the human hand.

With these and other objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings:—Figure 1 is a view in elevation of my improved artificial hand looking at the palm portion, and Fig. 2 is a view in longitudinal section through the thumb and index finger.

The reference character 1 represents the palm or body portion of the hand, which may be composed of wood or other suitable material, 2 represents the thumb, and 3, 4, 5, and 6 the fingers respectively of the hand, the thumb and fingers being composed of rubber or other elastic and flexible material.

In all of the fingers coiled springs 7 are embedded and secured in sockets 8 in the hand by cement or other means.

The thumb 2 is made with a plunger 9 at its inner end having a reciprocating movement in an elongated socket 10 in the hand and a coiled spring 11 is located in said socket and exerts outward pressure on the thumb.

A rubber glove or covering 12 incloses and snugly fits the fingers and thumb portion of the hand, and it will be observed the end of the thumb is slightly spaced from the hand to permit the desired reciprocating movement thereof, such open space being hid from view by the inclosing glove or covering 12.

A hook 13 is carried by the hand and preferably located between the third and fourth fingers and this hook allows the lifting of heavy objects which could not be held by the thumb and fingers.

The thumb 2 is positioned immediately under the index finger, so that when pressure is exerted on the end of the index finger, the end of the thumb will be spaced therefrom and be free to be projected against the object. As the thumb has a yielding inward movement, and the index finger a yielding upward movement, the hand can be so manipulated by pressure on the index finger and a forward movement, at the same time, by the thumb, so as to cause small objects to become wedged and held therebetween and thus enable the artificial hand to take the place of the human hand to a great extent.

A great many slight changes might be made in the general form and arrangement of the several parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. An artificial hand, comprising a body portion, flexible fingers, a thumb, coiled springs connecting the fingers and body portion, and a covering inclosing the fingers and body portion.

2. An artificial hand comprising a body portion and fingers elastically connected thereto, a thumb spring pressed and movable longitudinally of the body portion, and a flexible covering inclosing the fingers, thumb and body portion.

3. An artificial hand comprising a body portion and fingers connected thereto, a thumb, a plunger on said thumb having reciprocating mounting in a socket in the body portion, a spring in said socket exerting outward pressure on the thumb plunger, and a covering inclosing the spaced juncture between the inner end of the thumb and the body portion.

4. An artificial hand, comprising a rigid body portion, rubber fingers, coiled springs connecting the fingers and body portion, a thumb having longitudinal movement in the body portion, and a glove or covering inclosing said fingers, thumb and body portion.

In testimony whereof I affix my signature, in presence of two witnesses.

CLAUDE M. BROADY.

Witnesses:

GEORGE OLTSCH,

G. M. COLE.