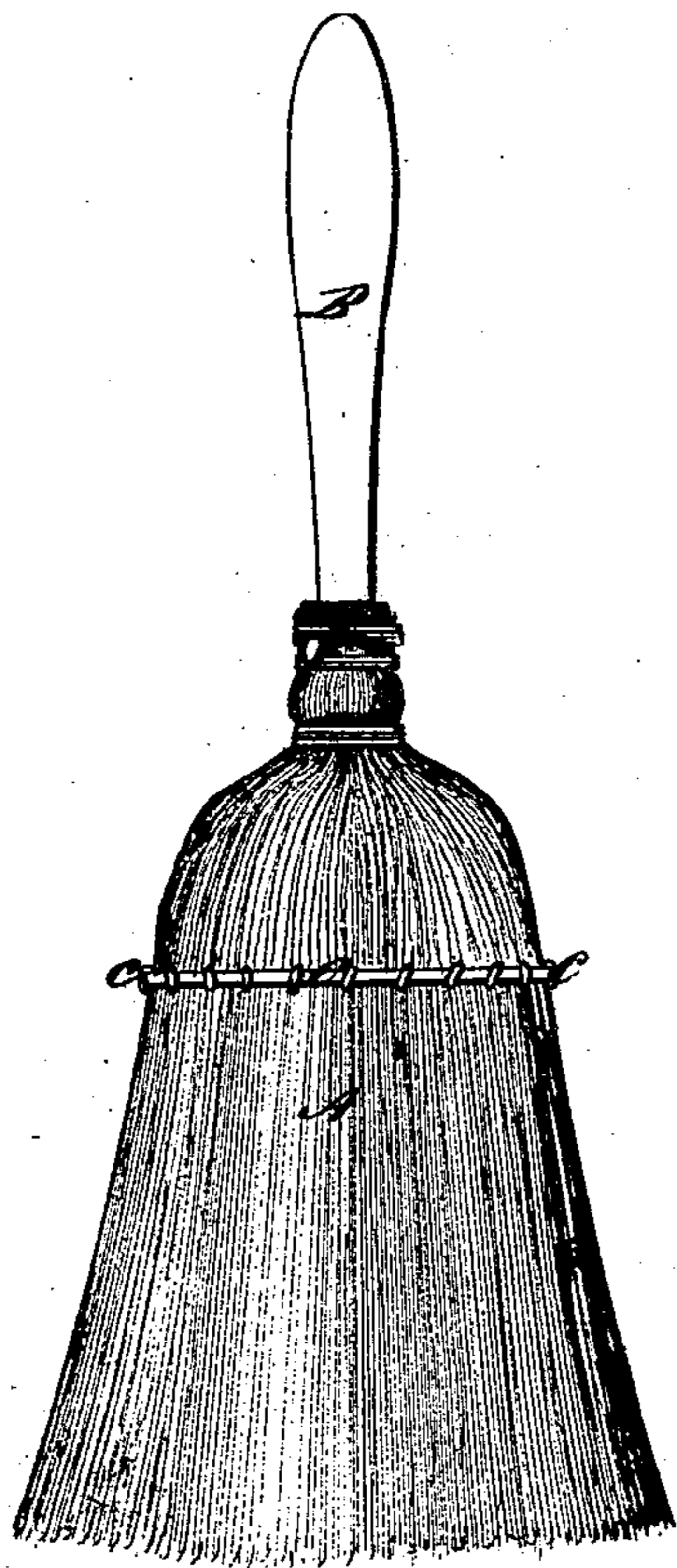


No. 104,834.

PATENTED JUNE 28, 1870.

E. M. CRANDALL.  
BROOM.



Witnesses  
J. A. Ellis  
J. White

Inventor  
E. M. Crandall  
By  
J. A. Alexander  
Att'y

# UNITED STATES PATENT OFFICE.

EDWARD M. CRANDAL, OF MARSHALLTOWN, IOWA.

## IMPROVED BROOM.

Specification forming part of Letters Patent No. 101,831, dated June 28, 1870.

*To all whom it may concern:*

Be it known that I, EDWARD M. CRANDAL, of Marshalltown, in the county of Marshall and State of Iowa, have invented certain new and useful Improvements in the Construction of Brooms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in surrounding a broom by one or more bands of india-rubber, which are held in position by stitching, substantially as hereinafter set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which represent a side view of my improved broom.

A represents the broom itself, attached in any of the known and usual ways to the handle B.

At the place where the broom-corn is usually bound together I place around it one or more rubber bands, C, which are sewed to the

broom-corn in such a manner as to allow the band to yield if the broom should be spread out and close it up together again.

When brooms are made, the corn is usually more or less green or damp, and when bound with twine are liable to become loose when the corn dries and shrinks; but with the rubber it is different, for, as the corn shrinks, the rubber band controls and holds the broom tight.

In place of the rubber band I may use any other suitable elastic material which will answer the same purpose.

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

A broom surrounded by one or more bands of india-rubber or other elastic material, and stitched to hold them in position, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

E. M. CRANDAL.

Witnesses:

C. W. FRACKER,  
M. H. HAYLAND.