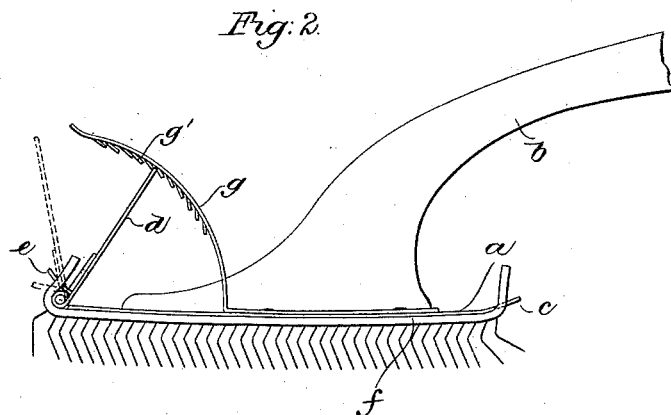
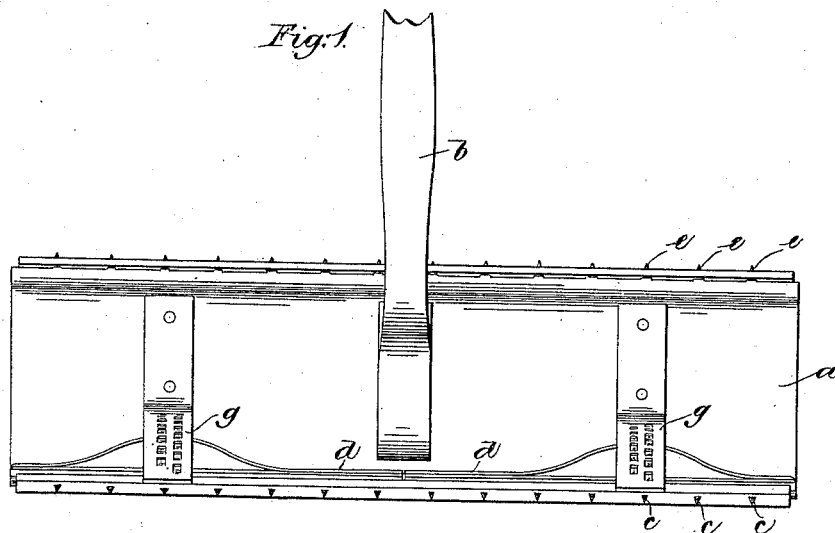


(No Model.)

G. I. HAEBERLE.
HAND CARD.

No. 422,772.

Patented Mar. 4, 1890.



Witnesses.
Edgar A. Goddin
Frank L. Emery-

Inventor.
George I. Haeberte,
by Lemby Gregory attys.

UNITED STATES PATENT OFFICE.

GEORGE I. HAEBERLE, OF LAWRENCE, MASSACHUSETTS.

HAND-CARD.

SPECIFICATION forming part of Letters Patent No. 422,772, dated March 4, 1890.

Application filed October 10, 1889. Serial No. 326,581. (No model.)

To all whom it may concern:

Be it known that I, GEORGE I. HAEBERLE, of Lawrence, county of Essex, State of Massachusetts, have invented an Improvement in
5 Hand-Cards, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

Hand-cards have heretofore been made by
10 tacking a card-clothing to a piece of wood; but in practice the card-clothing soon works loose or stretches, to the injury of the card.

This invention has for its object to provide a hand-card in which the card-clothing may
15 be applied or removed readily, so that any slack in the card may be taken up and the card be kept in the best working condition.

I have invented means for attaching the toothed face to the back plate, whereby it may
20 be readily applied and removed.

Figure 1 shows in plan view a hand-card embodying this invention, and Fig. 2 an end view of the hand-card shown in Fig. 1.

The back plate *a*, preferably of sheet metal,
25 has attached to it a handle *b*. A series of teeth *c* are formed upon or arranged on one edge of the back plate *a*. A metal plate or strip *d*, having teeth *e*, is pivotally connected with the opposite edge of the back plate *a*. The said
30 plate or strip may extend the entire length of the back plate, or it may be composed of two or more sections, as herein represented, two sections being employed. The card-clothing is formed at or near each edge with a series
35 of holes to receive the series of teeth *ce*. One or more catches *g*, shown as yielding arms, two being herein shown, are attached to and rise from the back plate *a*, said arm or arms each having upon its under side a series of
40 teeth *g'*, preferably shaped as ratchet-teeth.

The card-clothing *f* having been applied to the teeth *ce*, the plate or strip *d* is turned on its point from the dotted to the full line position, causing its outer edge to pass under and engage the teeth *g'* of the catches *g*, and there-
45 by hold the card-clothing properly stretched.

The plate *d* may be moved more or less, as desired, to take up any slack that may exist or occur at any time.

The teeth *ce* afford a very cheap and ready
50 means by which to apply the card-clothing.

The form or shape of the hand-card herein described is of special value, as in practice it is less liable to destroy the card-clothing than
55 any known to me.

I claim—

1. The back plate *a*, having a series of teeth at one edge, combined with the pivoted plate or strip *d*, attached to the opposite edge and having a series of teeth at or near one edge,
60 the card-clothing *f*, provided with a series of holes near its edges engaged by the said teeth, and means, as ratchet-teeth, for engaging and holding the free end of the plate *d* in adjusted position, substantially as described.
65

2. The toothed back plate *a*, combined with the plate *d*, pivotally attached to one edge thereof, a yielding arm rising from said back plate and provided upon its under side with a series of ratchet-teeth for holding the pivoted plate
70 in adjusted position, and a card-clothing *f*, attached at one edge to said plate *d*, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of
75 two subscribing witnesses.

GEORGE I. HAEBERLE.

Witnesses:

JEREMIAH J. LOONEY,
ADOLF P. VORHOLZ.