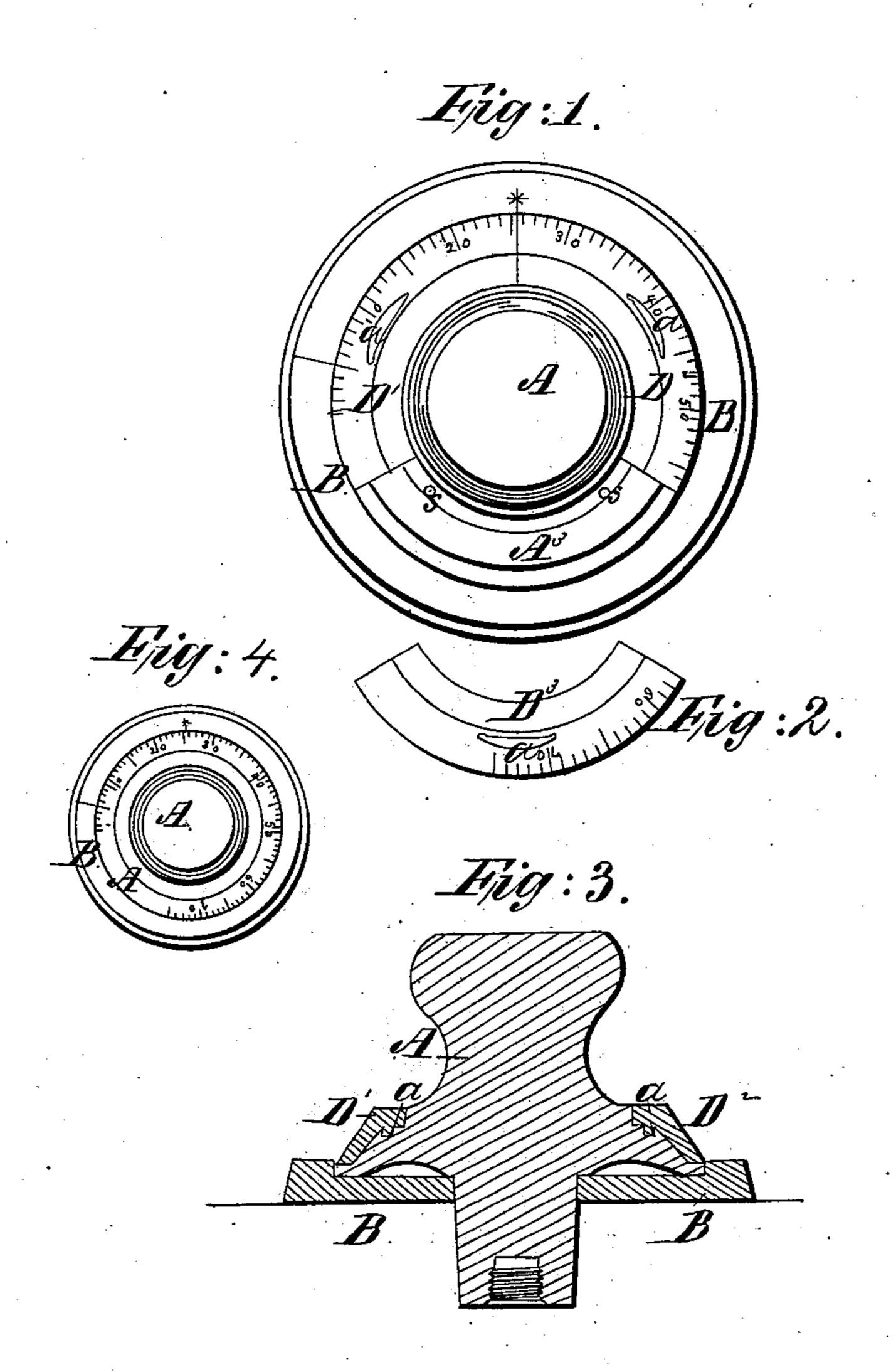
A. Hardy,

Permutation Lock.

1985,227. Patented Dec. 22,1868.



Mitnesses: Mayceadin James Danmers.

Inventor: Answitardy



## ANSON HARDY, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 85,227, dated December 22, 1868.

## IMPROVEMENT IN INDICATOR FOR PERMUTATION-LOCKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Anson Hardy, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful Improvement in Locks; 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, making a part of this specification, in which—

Figure 1 is a view of my improvement with a por-

tion removed:

Figure 2, a view of the piece removed;

Figure 3, a section; and

Figure 4, a view (for illustration) of the portion of a

lock on which my improvement is based.

My invention relates to the improvement of indicators of locks, which can be opened only by a combination or permutation of letters, figures, or other signs.

Fig. 4 represents the indicator, as now commonly made, which is too well known to need description. In all such locks now made, the indicator is permanently attached to the lock, so that any one who knows the combination has, at all times, the key of the lock.

This combination (which is, so to speak, a mental key to the lock,) is, for security, communicated commonly to two or three persons, for instance, to the cashier and president of a bank, either of whom can,

of course, unlock the bank-safe.

My improvement consists in making the indicator detachable, so that it may be taken off the lock. With my improvement, therefore, this detached indicator is necessary, as well as knowledge of the combination, in order to open the lock. In other words, in addition to the mental key, (or knowledge of the combination,) which is all that is required to open a door secured by the common combination-lock, one or more material keys (the detached indicator) are necessary in my lock.

Consequently, if the detached indicator be made in separate pieces, and one be given to each of the persons intrusted with a knowledge of the combination, neither can open the lock without the knowledge and consent of the others.

The drawing shows this detachable indicator divided into three pieces, which is the number I prefer, though I do not wish to confine my claim to any particular number. These pieces, when properly put together, form an indicator not different, materially, from that of the common combination-lock. Each piece, of course, is so marked that it can always be put into its proper place.

When these pieces are in place, the lock does not differ from the well-known combination-lock, and there-

fore is not here described.

These pieces must, of course, be so fitted to the knob that they will turn with it, and have no motion around it. In the drawing, this is accomplished by pins S S, which fit into corresponding holes in the knob.

In the drawings—

A represents the knob.

B represents the plate in which it turns.

 $D^1$   $D^2$   $D^3$ , the detachable indicators.

a a a are recesses, which afford a means for taking hold of the pieces in order to detach them.

Having thus described my invention,

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

The detachable indicator for combination-locks, constructed in two or more parts, as and for the purpose described.

ANSON HARDY.

Witnesses:

J. E. MAYNADIER, JAMES DAMMERS.