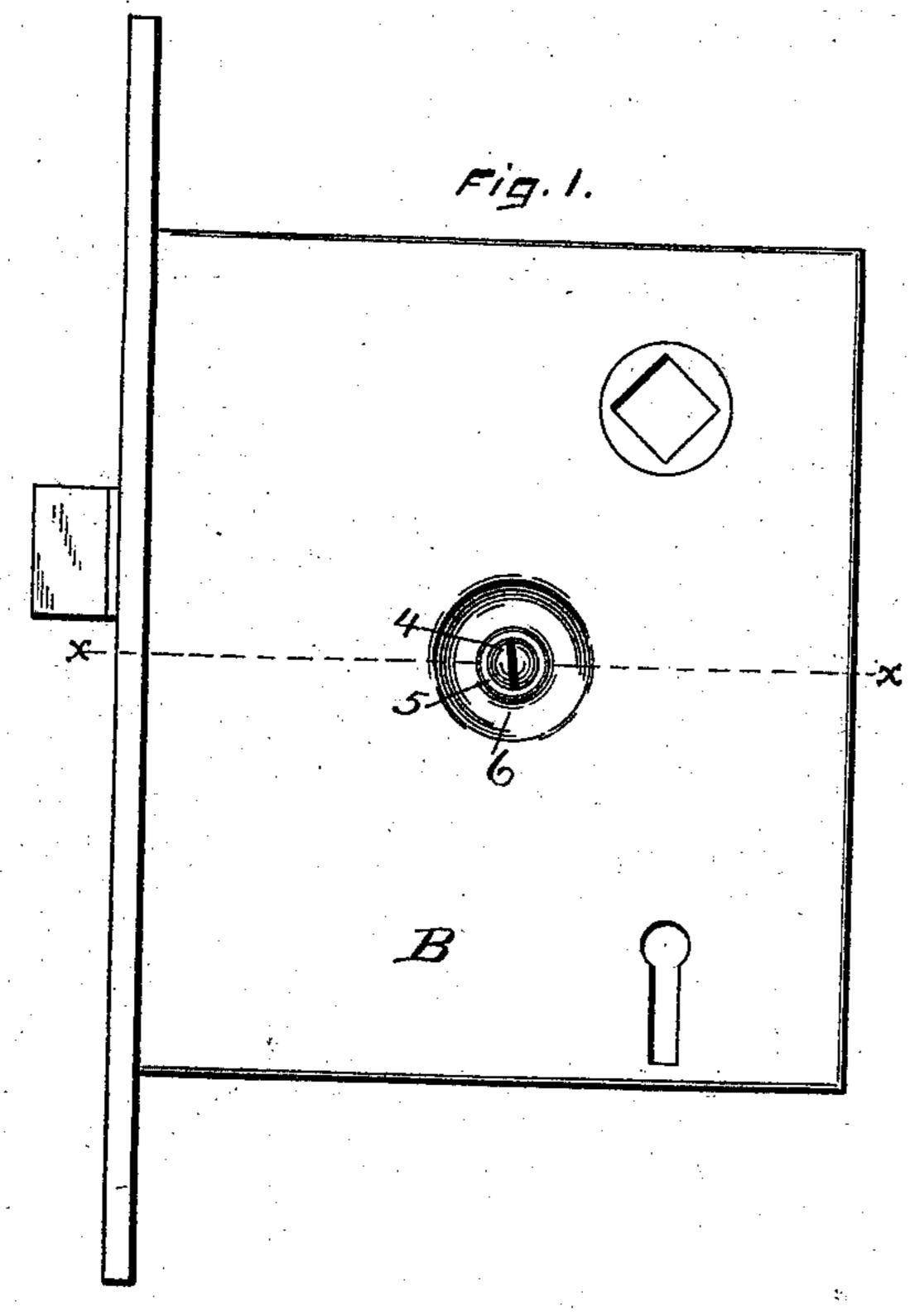
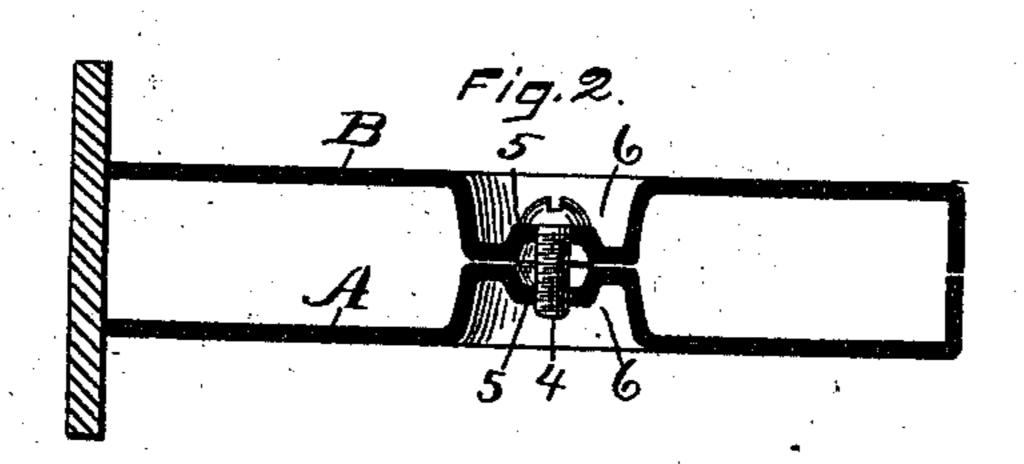
(No Model.)

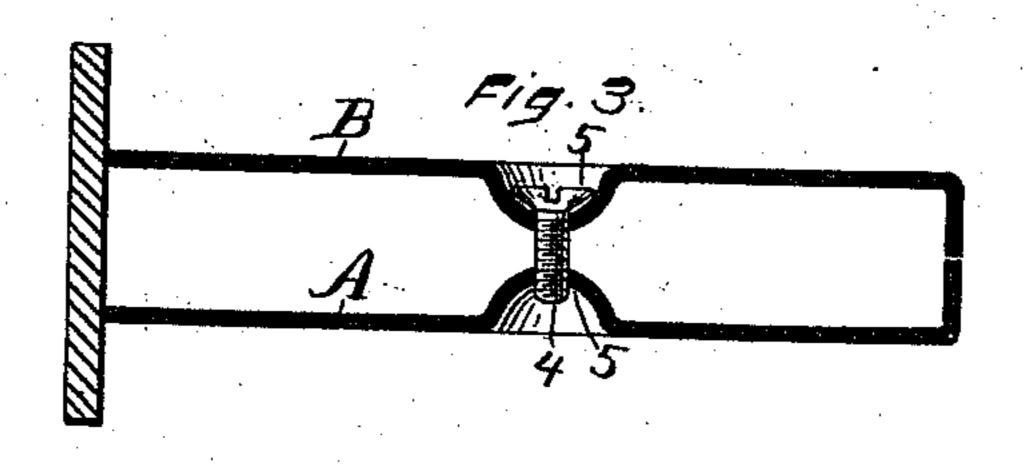
## H. E. RUSSELL, Jr. SHEET METAL LOCK CASE.

No. 412,419.

Patented Oct. 8, 1889.







Witnesses. John Edwards fr H. L. Hungerford

Honry Entor. Hy James Shepard. Atty.

## United States Patent Office.

HENRY E. RUSSELL, JR., OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE RUSSELL & ERWIN MANUFACTURING COMPANY, OF SAME PLACE.

## SHEET-METAL LOCK-CASE.

SPECIFICATION forming part of Letters Patent No. 412,419, dated October 8, 1889.

Application filed July 18, 1889. Serial No. 317,881. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. RUSSELL, Jr., a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Sheet-Metal Lock-Cases, of which the following is a specification.

My invention relates to improvements in sheet-metal lock-cases; and the objects of my improvement are to cheapen the construction and improve the efficiency of the article with particular reference to fastening the lock-plates together.

In the accompanying drawings, Figure 1 is a side view of my lock-case. Fig. 2 is a sectional view of the same on line x x of Fig. 1, and Fig. 3 is a like view of a modification of the same.

My improvement is applicable to sheet-20 metal lock-cases and latch-cases in general, and relates to the construction of those portions of the lock-plate and cap-plate which receive the fastening-screw.

Examples of sheet-metal lock-cases to which my improvement is applicable may be seen in the patents to C. M. Burgess, Nos. 396,915 and 396,916, January 29, 1889, and Nos. 399,239 and 399,240, March 12, 1889.

In those portions of the lock-plate A and cap-plate B which are designed to receive the fastening-screw 4, by which said plates are held together, I form a screw-seat 5 by swaging or striking up the metal from the body of the plates in the form of a hollow boss, the depression being on the outside of the plates and the projection on the inner side. I prefer to make the projection about equal to one-half the thickness of the case, and form a reversely-swaged central portion 6, as shown in Figs. 1 and 2, to bring the screw-seats a little distance apart, while the principal bosses contact with each other and hold the lock-plates

a given distance. In Fig. 3 the hollow bosses are made to project inwardly a little less than half the thickness of the case, and the reversely-swaged central portion is omitted. In both forms one part is perforated with a hole large enough to receive the body of the screw, and the other part has a smaller threaded hole to receive the threaded portion 50 of the screw.

By my improvement I arrange for the fastening-screw at practically no expense, as the screw-seats may be formed simultaneously with striking up the other parts of the case. 55 I also in the preferred construction dispense with the separately-formed stud or post to keep the lock-plates the proper distance apart. I bring the screw-seats so near each other that a short screw may be used, and the screwcan 60 be much more conveniently inserted than it can in a lock-case having widely - separated seats. The end of the screw may extend through the screw-seat and not project beyond the lock-plates, thereby making it espe- 65 cially adapted for sheet metal having no great thickness.

I claim as my invention—

1. The herein-described sheet-metal lock-case, having screw-seats swaged or struck up 70 in its plates in the form of perforated hollow bosses projecting inwardly, substantially as described, and for the purpose specified.

2. The herein-described sheet-metal lock-case, having screw-seats swaged or struck up 75 in its plates in the form of perforated hollow bosses projecting inwardly about half the thickness of the case, and having also the reversely-swaged central portion, substantially as described, and for the purpose specified.

HENRY E. RUSSELL, Jr.

Witnesses:
THEO. E. SMITH,
M. S. WIARD.