

No. 735,794.

PATENTED AUG. 11, 1903.

C. E. MORGAN.

FASTENING.

APPLICATION FILED SEPT. 9, 1902.

NO MODEL.

Fig. 1.

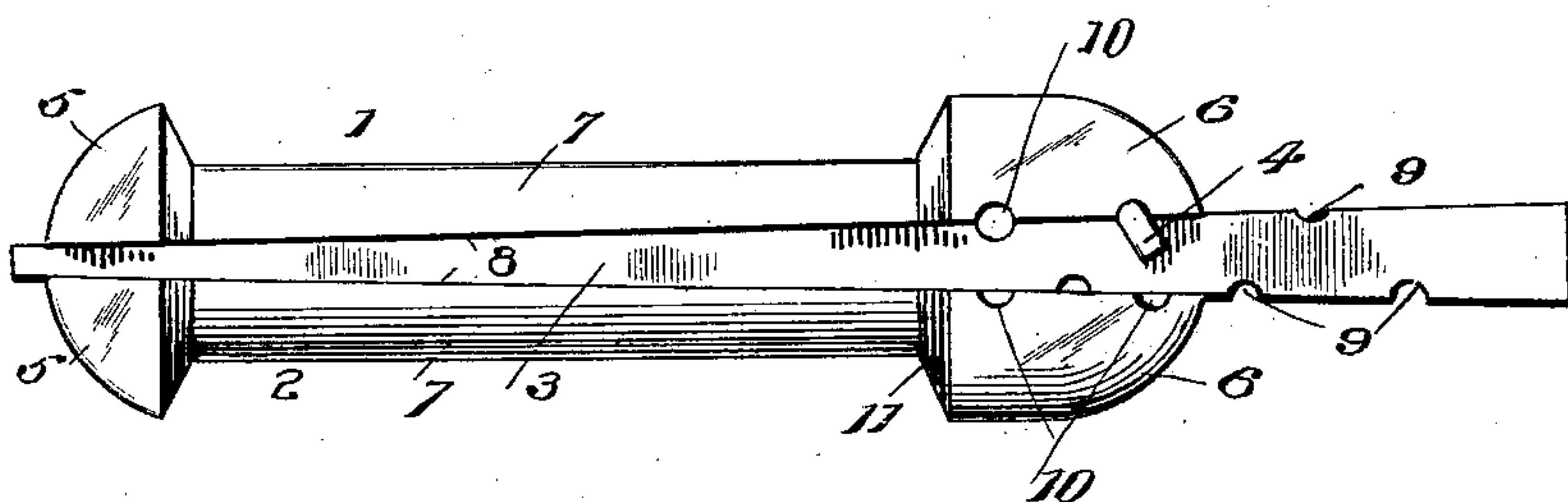


Fig. 2.

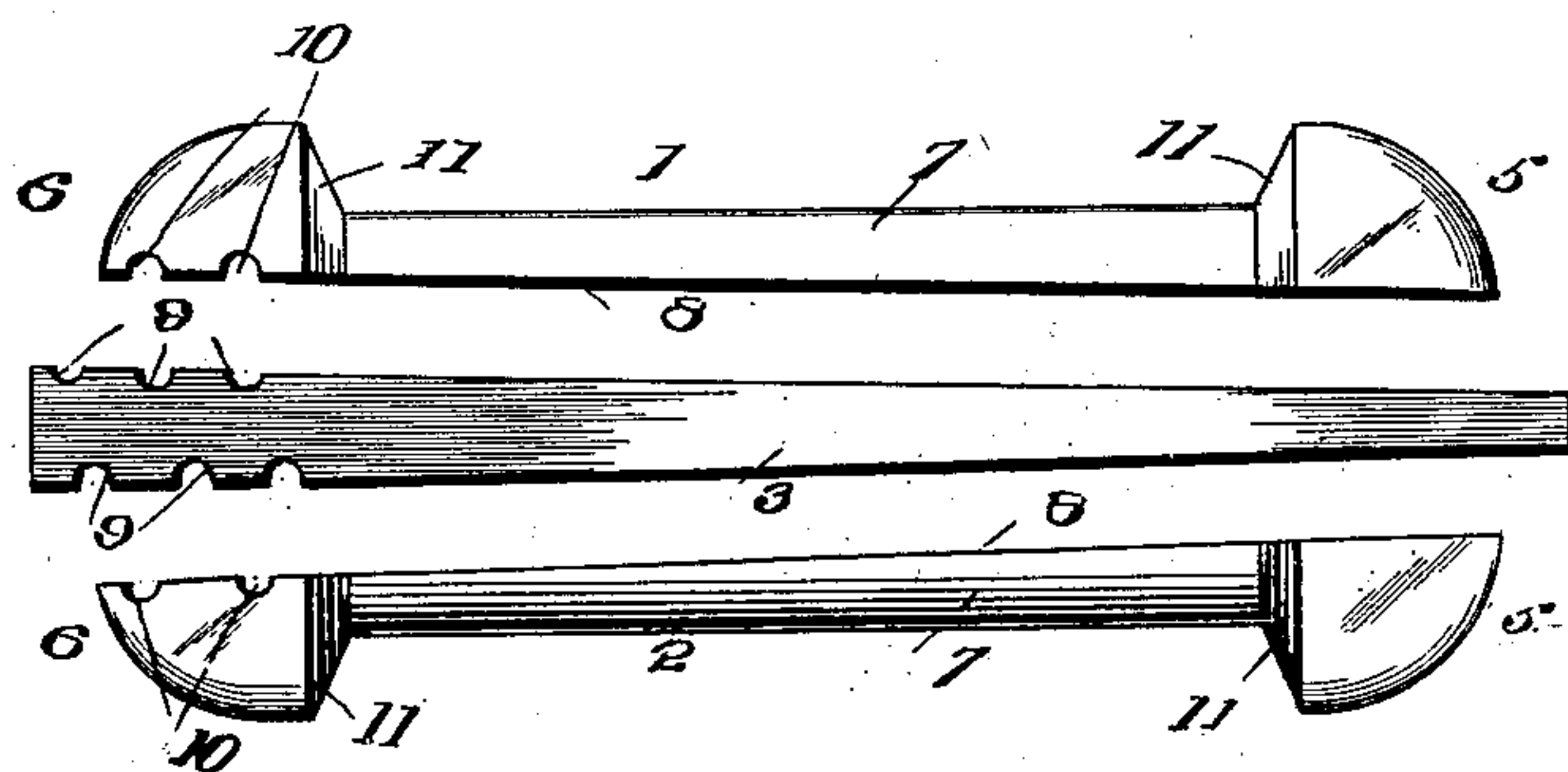
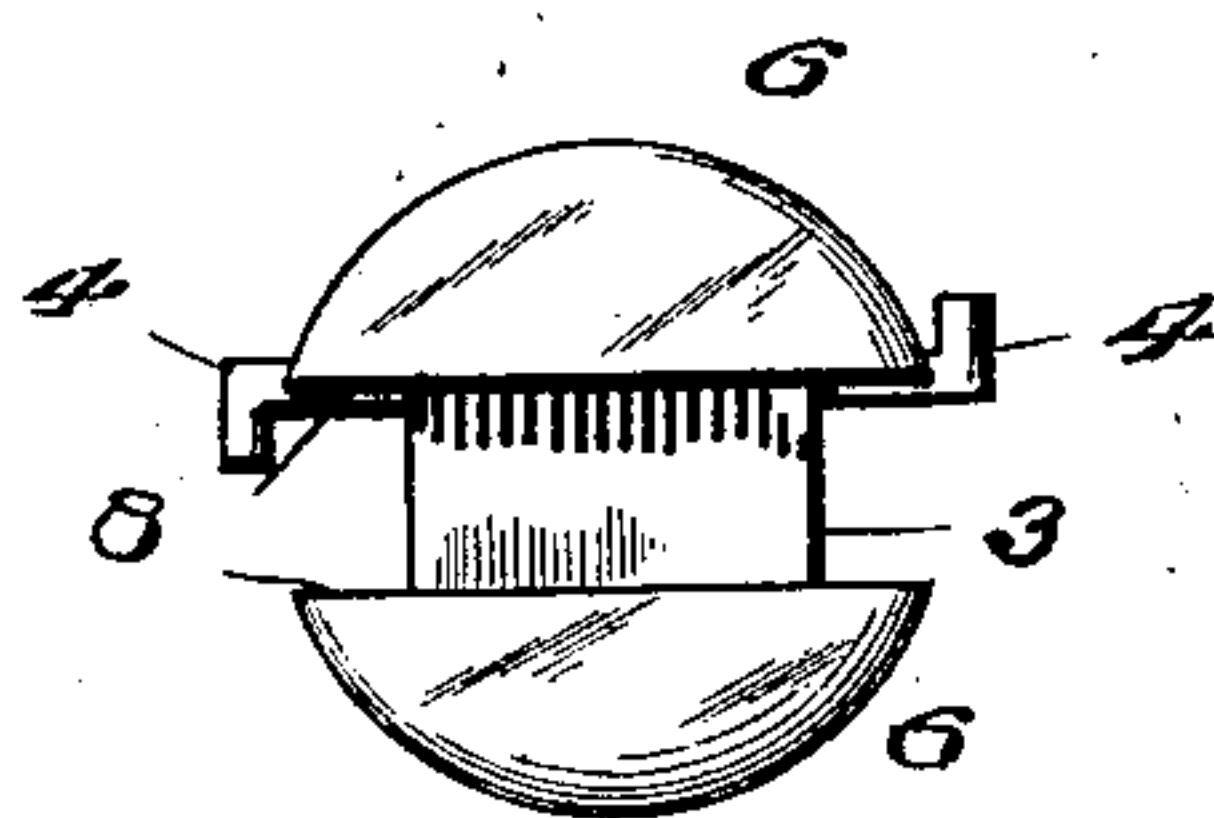


Fig. 3.



Witnesses

Wm. H. Miller
George G. Watt

By

R. A. Blaney Attorneys

Inventor
C. E. Morgan

UNITED STATES PATENT OFFICE.

CHARLES E. MORGAN, OF PORTLAND, OREGON, ASSIGNOR OF ONE-HALF TO
HARVEY D. JONES, OF PORTLAND, OREGON.

FASTENING.

SPECIFICATION forming part of Letters Patent No. 735,794, dated August 11, 1903.

Application filed September 9, 1902. Serial No. 122,737. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. MORGAN, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Fastenings, of which the following is a specification.

This invention provides a simple sectional fastening device for use on railway-joints or chairs, machinery, and the like.

The essential object in view is to provide a fastening which may be expeditiously applied or removed, at the same time being very effective in preventing any looseness or play of the parts desired to be secured.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of the fastening, all parts being assembled. Fig. 2 is a plan view of the complementary sections and the key separated. Fig. 3 is an end view.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The fastening comprises four essential parts—complementary sections 1 and 2, wedge-key 3, and a lock-pin 4. The sections 1 and 2 are alike in structural formation, consisting of the heads 5 and 6, at opposite ends thereof, and the shank portions 7. Corresponding faces upon the sections are flat, as shown at 8, and incline toward the heads at one extremity of said sections. The key 3, as before indicated, is wedge-shaped and has transverse grooves 9 upon opposite sides, the grooves of one side being disposed intermediate the spaces between the grooves upon the other side. To cooperate with the above-described groove are grooves 10, of like formation, but located upon the flat sides of the heads 6 of the sections. The grooves 9 and

10 are adapted to register with each other in applying the device, and the pin 4 cooperates to prevent displacement of the key 3 after it has been forced between the sections 1 and 2, spreading the same to the required degree. The inner faces 11 of the heads 5 and 6 are inclined, thus providing cam-surfaces which have a tendency upon the spreading of the sections, when the key 3 is forced therebetween, to additionally clamp the parts to which the fastening is being applied together. The fastening is preferably made from hardened metal, such as steel, iron, or the like.

In applying the device to a rail-joint or such structure the two fish-plates are clamped to the sides of the rail in the ordinary manner, and the sections of the fastening are placed through the holes one after the other, the first section being shoved to one side to allow for insertion of the other. The key 3 is inserted between the sections and is driven in hard, so as to spread the sections and firmly secure the fastenings. The pin 4 completes the operation by locking the key in its position, the ends of the said pin being bent over to prevent displacement of the same. To remove the fastening, a bent portion of the pin 4 is cut off by a cold-chisel, nippers, or other suitable tool and same taken out, and the key may then be readily driven from between the sections, collapsing the fastening in a manner that will be easily comprehended, whereupon the whole may be taken apart. The staggered arrangement of the notches upon the opposite faces of the key 3 allows a nicety of adjustment of the same and is advantageous for this reason.

The device embodies a very simple arrangement of parts, is cheap of manufacture, and easily applicable to different uses. I am not to be limited to the exact details of construction as illustrated, but may make such changes by way of modification according to the spirit of the invention and scope of the appended claim.

Having thus described the invention, what is claimed as new is—

A fastening constructed substantially as set forth, the same consisting of similar sections having terminal enlargements which unitedly form heads, the inner sides of the heads be-

ing inclined, said sections being plano-convex in transverse section and having their inner faces oppositely inclined throughout their length, a plurality of transverse grooves in
5 the inner faces of corresponding terminal enlargements, a wedge adapted to be driven between the sections of the fastening to spread them, a series of transverse grooves in opposite faces of the wedge near its larger end, the
10 grooves in one face being intermediate of the grooves in the opposite face, and a lock-pin

to cooperate with matching grooves in either face of the wedge and the adjacent terminal enlargement of a section, substantially as specified.

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

CHARLES E. MORGAN.

Witnesses:

A. T. LEWIS,
NELLE HICKEY.