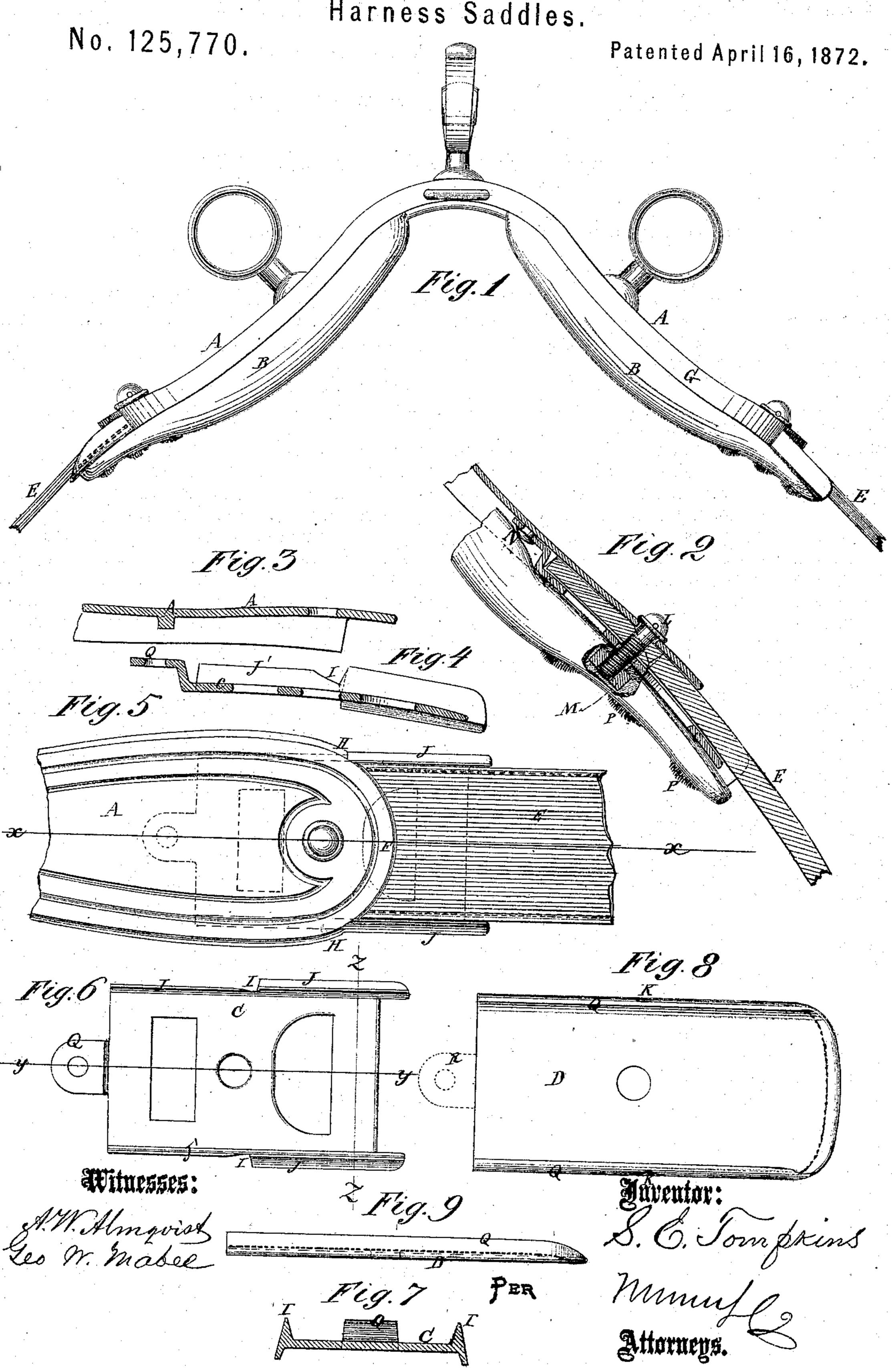
## SAMUEL E. TOMPKINS. Harness Saddles.



## UNITED STATES PATENT OFFICE.

SAMUEL E. TOMPKINS, OF SING SING, NEW YORK.

## IMPROVEMENT IN HARNESS-SADDLES.

Specification forming part of Letters Patent No. 125,770, dated April 16, 1872.

Specification describing a new and Improved Harness-Saddle or Coach-Pad, invented by SAMUEL E. TOMPKINS, of Sing Sing, in the county of Westchester and State of New York.

My invention relates to improvements in the coach-pads particularly intended for double harness, and which have heretofore been, for cheapness, made with a metal top plate and leather under pad, and finished on the end with a metal extension of the top plate instead of a leather pad, inclosing a metal stiffening-plate, as in the better class; and it consists of separate and attachable metal or leather extensions, either of which may be used at will, as preferred; and it also consists of a construction of the top plate by which it is adapted for said extensions, whereby I obtain greater beauty of design and finish, and provide a form of top plate that can be cast cheaper, and that insures more perfect and uniform castings than can be had with the top plates as at present arranged.

Figure 1 is a side elevation of my improved | harness-saddle, showing one end finished with the metal extension and the other with the leather. Fig. 2 is a longitudinal section of the part of the saddle-tree finished with the metal extension, said section being taken on the line x x of Fig. 5. Fig. 3 is a longitudinal section of a portion of the metal top plate. Fig. 4 is a longitudinal section of the metal attachable extension. Fig. 5 is a plan of the right-hand end of Fig. 1. Fig 6 is a plan of the separate attachable metal extension. Fig. 7 is a crosssection of Fig. 6 on the line zz. Fig. 8 is a plan of the separate leather attachable extension, and Fig. 9 is an edge view of Fig. 8.

Similar letters of reference indicate corre-

sponding parts.

A is the metal top plate; B, the leather pad under it; C, a separate attachable metal extension; D, a separate leather extension, also attachable; and E represents the side straps. The said top plate terminates at the lower ends in the rounded form shown at F, and it is cast with the flanges G at the edges and under side corresponding to the leather binding of the pads of the better class, between which said flanges the leather pads are confined, as in the trees of the cheaper class heretofore made; but instead of extending these flanges beyond the ends of the plate A, and having a cross-bar or plate connecting them at the ends, all in one

casting, as heretofore done, I have the said flanges terminate at H, a short distance behind the end F, and I curve those upon the outside to a thin edge, or nearly so, on the end for fitting nicely against the ends I of flanges J of the metal extension-plates C, or fitting in the slight notches K of the leather extensions D, which said separate and attachable extensions I use instead of the aforesaid permanent extensions. The flanges J, also other flanges, J', or prolongations of said flanges J, which extend upward between flanges G, are on the upper side of the extension-plates, and constitute, below the ends of the flanges G, the side finish for the side straps for a considerable distance. The parts J' of these flanges bear against the under side of plate A, and keep the plates C a sufficient distance below it to afford space for the side straps to enter between them and said plate A, and the leather pads B come under said plates C, and all are clamped tightly together by the screws L, which pass through plate A, said straps E, plates C or D, and screw into nuts M bedded in the said leather pads. Besides this fastening, the metal plates are further secured at the upper end by a studpin, N, cast on the under side of plate A, and an eye-plate, O, formed on the upper end of plate C, in such manner that, when said plate C is adjusted to its position, the eye of said plate O will fit over stud N, so that the latter may be riveted down to fasten the eye-plate; but in some cases this stud-pin will not be headed down, so as to admit of changing the extension after the harness is made, as is sometimes desirable. The leather extension D may also be further secured by the tufting P, which may be made to pass through it, or they may be secured wholly by said tufting. In consequence of using these extensions C or D, and the fitting of them under the plates A for some distance above the lower ends between the flanges G, the said plates A are necessarily swelled outward at the edges, or, in other words, widened thereat, to make room for the flanges or binding of the said plates, and this adds considerably to the beauty of the design, especially when formed on the lines represented in Fig. 5. The leather extension D has binding, Q, on the edges raised above the plane to correspond with the flanges J J' of the metal extension C.

In the better class of harness the top plate is inclosed between the leather, and the bindings, corresponding to the flanges G in this example, are formed on the cushion, which is the most desirable way, except for the cost, and which it is the object of this invention to approximate, and yet economize considerably in the cost. I propose, therefore, to have my top plate made with ends in separate pieces, to be attached as heretofore described, so that I may use leather or metal ends, as I may choose, when desirable. The leather extension may also be fastened to the stud-pin N by having a tongue, R, extending upward far enough, and provided with an eyelet. Another advantage in the use of the attachable iron end is that the cushion part is fitted to the plate A, and the space between it and said plate A for the side strap is preserved much easier than in the old way, in which it is necessary to insert leather pieces temporarily, over which the leather cushion is fitted, and then the pieces are withdrawn and the side straps put in, which requires experienced workmen; whereas in this case, the metal extension being put on, it remains and becomes the form or part to which the cushion

is fashioned. In the casting of these plates A together as heretofore done the molds for the prolongations of the flanges G beyond the ends of plate A had to be so small it often happened that the said flanges were imperfect on account of the chilling of the metal, so as not to flow freely, and other well-known difficulties attending the making of fine castings or parts thereof, all of which are not encountered in my present plan.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent—

1. The harness-saddle or coach-pad composed of the metal plate A, cushion B, and a separate and attached metal or leather extension, C or D, combined together and with the side straps E, substantially as specified.

2. The said metal top plate, constructed and arranged as described, and having the studpin N cast on it for securing the said attachable extensions, substantially as specified.

SAML. E. TOMPKINS.

Witnesses:

GEO. W. MABEE, T. B. MOSHER.