S. Walker,

Trade Clasp.

No. 29,847. Patented Aug. 28, 1860.

Fig. 2.

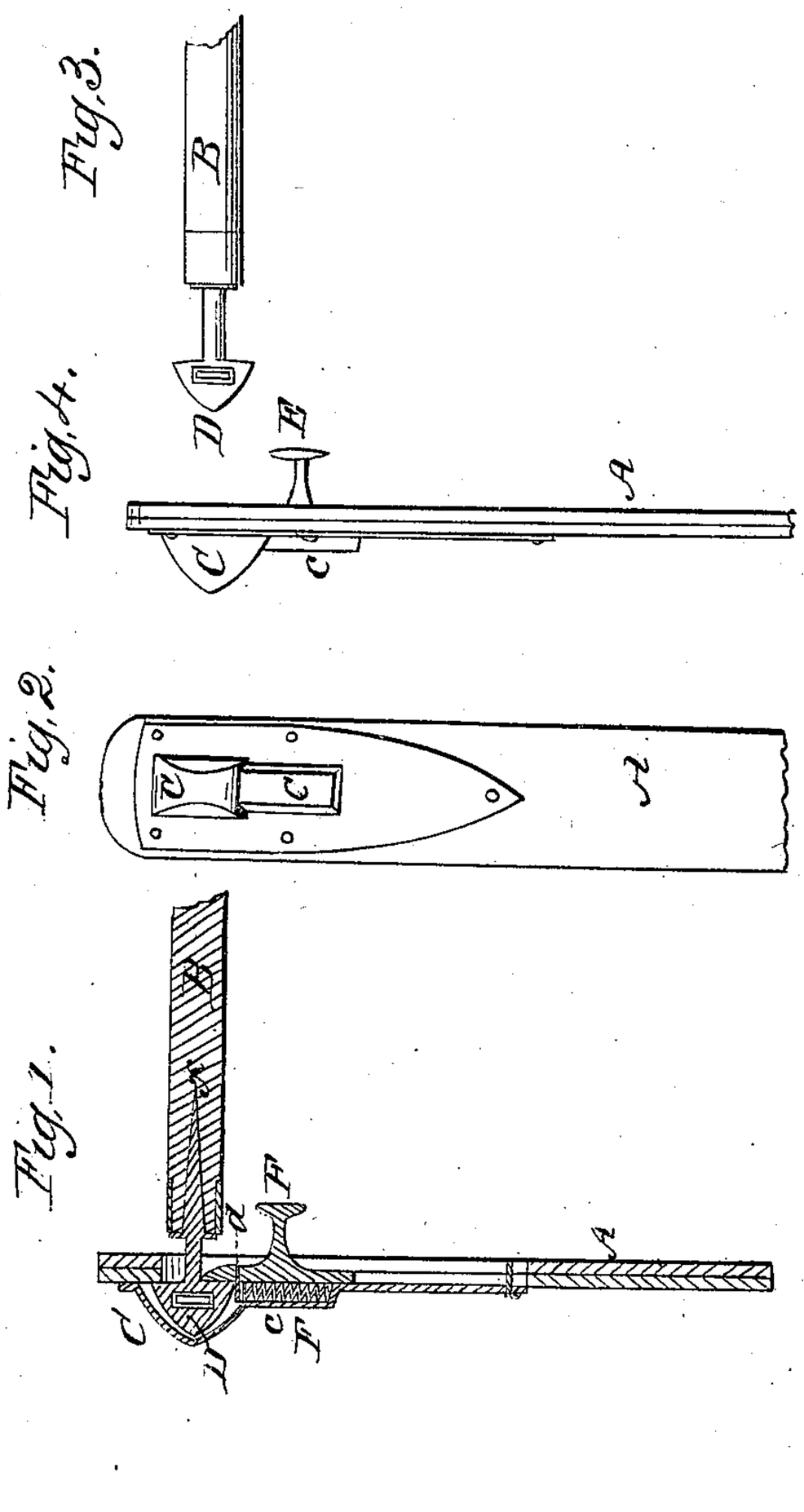

Fig. 3.

Fig. 4.

Fig. 1.

Witnesses.
A. C. Gale.
C. J. Gale

Inventor.
Sylvenus Walker
per his attorney
V. A. D. Gale

UNITED STATES PATENT OFFICE.

SYLVENUS WALKER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND S. S. HEMENWAY, OF SAME PLACE.

TRACE-FASTENER.

Specification of Letters Patent No. 29,847, dated August 28, 1860.

To all whom it may concern:

Be it known that I, SYLVENUS WALKER, of the town or city of Boston, county of Suffolk, and State of Massachusetts, have invented a certain new and useful Improvement in the Fastenings of Tugs or Traces of Harnesses to the Whiffletree; and I hereby declare that the following is a full and sufficient description of the construction and operation of the same, reference being had to the accompanying drawings and reference letters marked thereon, making a part of this specification.

The nature of the invention consists in the use of a certain shield protector on the outer sides of the tugs of a pair of traces to prevent the head of the hook, which holds the end of the whiffletree to the leather tug, from catching and entangling clothing or other substances of a like character. It is a well known evil, that the hooks in question very often entangle the lash of the driver, and the reins are every now and then caught in the same way. The shield in question therefore serves a valuable purpose in preventing accidents.

In the drawings herewith accompanying Figure 1 represents an edge of the trace in section of both the trace mounting and whiffletree. Fig. 2, an outside view of the trace and its shield. Fig. 3, a detached view of the trace. Fig. 4, a detached view of a part of the whiffletree.

A represents the leather trace or tug in two thicknesses with a hole through it near the end to receive the head or hook on the end of the whiffletree.

B is the part of the whiffletree, containing the shank of the hook or head piece D driven into it.

C is the shield part of a metallic plate covering the outside of the tug as seen in Fig. 2.

D is the head or hook on the end of whiffletree that is received through the tug by pushing back the sliding catch.

E is the sliding catch that works in a longitudinal slot in the tub also in the cavity of the projecting part (*c*) with the spiral spring F which tends to throw the catch back against the shank of the head D. The catch E, is provided with a small projection (*d*) against which is received the end of the spiral spring, F, while the opposite end of said spring is fastened to the shoulder part of the part (*c*) as seen in Fig. 1. This spring catch being placed on the inside of the tug is out of the way of entangling the reins or any projecting bodies. The shield piece *c* also operates as a protection to the head D and has great advantage over the use of a leather thong put through the head and fastened to the wood B, as is done in the method now in use. The catch E is used to perform the service of the leather thong fastening. This last is prepared as follows: The leather thong being cut from a strip of leather a little wider at one end, the widest end being nailed to the wood of B, at or near position, (*x*,) and the other end drawn over the upper edge of the tug and thrust through the hole in D. The whiffletree on coaches being round or cylindrical, and connected to the coach by a leather band passing loosely around the middle thereof allows said whiffletree to rotate or to turn sometimes half a rotation so that the thong by its own gravity is liable to drop out of the hole in D, and the tug to become loose or detached from its fastening, and serious accidents are liable to follow. My improvement obviates all these difficulties and shields the parts involved in the fastening from outside obstructing bodies and besides presents a comely and ornamental part of the harness in place of an uncomely and irregular projection liable to be obstructed by foreign obstacles.

The outside silver plate may be of iron and japanned or left in bright and ornamented metal.

This fastening is operated as follows: The opening on the inside of the tug is placed against the head D, which is inclined each way from the apex or end, the catch being also beveled, so that by slightly pressing the end of D against the beveled face of the catch E, and the end part of the slot in the tug, the head D will slip into the hole and the spiral spring F, reacting will press the catch E against the neck of D and thus hold the parts firmly in place. When they are to be detached, seize the knob of D by the thumb and finger, push back the spring, and at the same time slightly incline the whiffletree with its end pulled backward horizontally the end of the hook D is first detached from the catch E, when the separation is completed without further direction.

I am fully aware of the practice of boxing in machinery and incasing fine gearing from

atmospheric dust. My devices are not designed for such purposes, but for the protection of the hooks of harness tugs from entangling foreign bodies.

Therefore what I claim as my invention and desire to secure by Letters Patent is—

Covering and protecting the projecting head D of the whiffletree on the outside of the tug by-shield piece C in the manner and for the purpose set forth.

SYLVENUS WALKER.

Witnesses:
WM. P. SPENCE,
WILLARD SNOW.