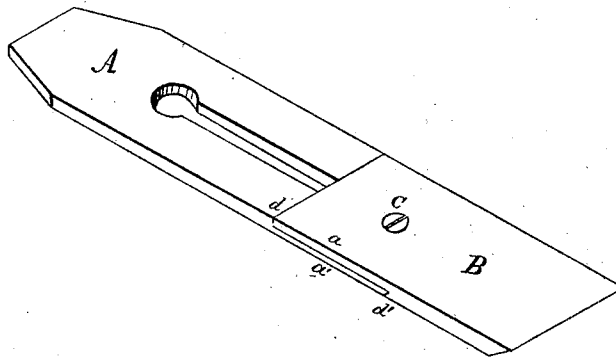


E. QUAST.
Plane Irons.

No. 145,311.

Patented Dec. 9, 1873.



WITNESSES

Isaac Trepp.
S. A. Holmes.

INVENTOR

Ernest Quast
By Dyer, Read & Co. attys.

UNITED STATES PATENT OFFICE.

ERNEST QUAST, OF JERSEYVILLE, ILLINOIS.

IMPROVEMENT IN PLANE-IRONS.

Specification forming part of Letters Patent No. **145,311**, dated December 9, 1873; application filed February 18, 1873.

To all whom it may concern:

Be it known that I, ERNEST QUAST, of Jerseyville, in the county of Jersey and State of Illinois, have invented a new Improvement in Plane-Irons; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention is a plane-bit having a shank of cast malleable iron, or common wrought-iron, and a removable cutting-edge of steel, the same constituting a new article of manufacture, as will be fully described hereafter.

In the drawing the plane-bit is shown in perspective.

A represents the upper section of the bit, of the usual form, and is made of iron, preferably cast malleable iron. B is the cutting-part, made of suitable cast-steel. C is a screw or rivet, by which the parts are held together: *a a'* are overlapping tongues, shaped to engage with each other, so as to form a scarf-joint of the two parts A and B. It will be seen that where the two parts A and B butt together at *d* and *d'*, the edge *d* is square,

while *d'* is beveled. Both may, however, be beveled, if so preferred.

When the steel part B is worn out, it can be quickly and easily removed by taking out the screw or rivet C. The part A, in consequence of being subject to but little wear, may thus be made to serve for almost an unlimited number of steel bits. It therefore follows that these plane-bits constructed as described, possess all the advantages of those made entirely of steel, and can be produced as cheaply as those made of steel and iron welded together, without that deterioration in the quality of the steel which is almost inseparable from the process of welding.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The plane-bit described, having the iron shank A and steel cutting-part B, as a new article of manufacture.

This specification signed and witnessed this 5th day of February, 1873.

Witnesses: ERNEST QUAST.

JAMES A. LOCKE,
DENNIS BROWN.