United States Patent Office.

J. R. TRYON, OF LA CROSSE, WISCONSIN.

Letters Patent No. 80,036, *dated July* 14, 1868.

IMPROVED COMPOUND FOR WELDING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. R. TRYON, of La Crosse, in the county of La Crosse, and State of Wisconsin, have invented a new and improved Welding-Flux; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same.

The object of this invention is to provide a superior welding-flux or compound for steel or iron, which operates to refine and toughen the metal at the welded surfaces, thereby securing a perfect junction of welded surfaces.

It consists of a powder composed of the following ingredients and proportions:

Borax, two and a half pounds; sal-ammoniac, ten ounces; black oxide of manganese, seven ounces; prussiate of potash, four ounces; red oxide (sesquioxide) of iron, one and a half ounce.

These ingredients are pulverized, calcined over a slow fire, and intimately mingled, when it is ready for use.

It is sprinkled on the heated welding-surfaces of the metal like common borax-flux.

The above proportions may be reasonably departed from, without materially impairing the efficacy of the compound.

I claim as new, and desire to secure by Letters Patent—

The welding-flux or compound, substantially as described.

J. R. TRYON.

Witnesses:

E. EHLMAN,

D. W. MARSTON.