## Anited States Patent Pffice.

## ALFRED PARAF. OF MULHOUSE, FRANCE.

Letters Patent No. 63,420, dated April 2, 1867.

## IMPROVED PROCESS OF CLEANING TEXTILE FABRICS AND YARNS SOILED IN DYEING.

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

## TO WHOM IT MAY CONCERN:

Be it known that I, Alfred Paraf, of Mulhouse, in the Empire of France, have invented certain new and useful improvements in the Cleaning of the Whites of Textile Fabrics or Yarns which have been soiled, during the dyeing operation, by madder or other vegetable coloring matter; and I hereby declare that the following is a full, clear, and exact description of the same:

My invention consists in substituting, for the soaping necessary to re-establish the whites of any kinds of textile fabrics or yarns which have been soiled by the dyeing in madder or similar coloring matter, the passage of such fabrics or yarns through animal charcoal and water, either alone or combined with vegetable charcoal.

To enable others to make and use my said invention and the manner in which the same is or may be carried

into effect, I shall now proceed to describe in particular the modus operandi.

If, for instance, textile fabrics or yarns be printed with madder, mordants which are aged, dunged, and dyed in madder, garancine or alizarine, I substitute for the soaping usually employed to re-establish the whites the following process: first, passage through boiling water, having for its object the washing off of the ligneous matter; second, passage through boiling water containing from one to five per cent. animal charcoal, either alone or combined with vegetable charcoal, and this is continued until the whites are perfectly or almost perfectly re-established. For light grounds it is sometimes necessary to pass the fabric through chlorine afterwards, but not for heavy grounds, and in all cases I dispense with all soaping.

Having thus described my said invention, I shall state my claims, as follows:

In the process of cleaning of the whites of textile fabrics or yarns which have been soiled, during the dyeing operation, by madder or other vegetable coloring matter, I claim, in lieu of and as substitute for the soaping heretofore practised, the use of animal charcoal, either alone or in combination with vegetable charcoal, substantially in the manner hereinbefore described.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

ALFRED PARAF.

Witnesses:

A. Pollok, Edm. F. Brown.