UNITED STATES PATENT OFFICE.

AUGUST LEOPOLD LASKA, OF OFFENBACH-ON-THE-MAIN, GERMANY, ASSIGNOR TO FIRM OF K. OEHLER, ANILIN- & ANILINFARBEN FABRIK, OF OFFENBACH-ON-THE-MAIN, GERMANY.

DARK-BROWN WOOL-DYE.

SPECIFICATION forming part of Letters Patent No. 767,069, dated August 9, 1904.

Application filed April 13, 1904. Serial No. 202,909. (Specimens.)

I cll whom it may concern:

Be it known that I, August Leopold Laska, doctor of philosophy, chemist, residing at 5 Gerberstrasse, Offenbach-on-the-Main, Germany, have invented new and useful Improvements in Dark-Brown Wool-Dyes, of which the following is a specification.

My invention relates to the manufacture of monoazo dyes by combining sulfo-conjugated diazonaphthalenes with meta-oxydiphenylamin. These dyestuffs yield on wool dyed in the usual manner and subsequently treated with chromic compounds acting as oxidizing agents dark-brown shades of valuable propteries.

The process may be carried out both in acid and in alkaline solution.

Example: Diazotize, as usual, 24.5 parts of naphthionate of sodium by means of 6.9 parts of sodium nitrite and forty-six parts of hydrochloric acid 20° Baumé. Then pour the diazo compound into a solution, cooled with ice, of 18.6 parts of meta-oxydiphenylamin in ninety parts of sodium lye of 35° Baumé and two hun-25 dred parts of water. At the end of the reaction acidulate weakly by adding hydrochloric acid to the solution, then salt out, dry, and finally mix the dyestuff thus obtained with 10.6 parts of soda.

The dyestuff forms a reddish-brown powder, dissolves in water with a yellowish red, in concentrated sulfuric acid with a reddishviolet color, and yields on wool when treated after dyeing with chromium compounds acting as oxidizing agents blackish - brown 35 shades. In a similar manner the combination may be carried out with other mono and disulfonic acids of the alpha and beta diazonaphthalenes.

Now, what I claim, and desire to secure by 40

Letters Patent, is the following:

1. The process of making monoazo dyes, consisting in the combination of sulfo-conjugated diazonaphthalenes with meta-oxydiphenylamin.

2. The process of making monoazo dyes, consisting in the combination of the sulfonic acids of the alpha-diazonaphthalene with meta-oxydiphenylamin.

3. As new articles of manufacture the mono- so azo dyes which result by combining the sulfonic acids of the alpha-diazonaphthalene with meta-oxydiphenylamin, forming reddishbrown powders, dissolving in water with a yellowish red and in concentrated sulfuric acid 55 with a reddish-violet color and yielding on wool when treated after dyeing with chromium compounds, acting as oxidizing agents, blackish-brown shades.

In testimony whereof I have signed my name 60 to this specification in the presence of two subscribing witnesses.

AUGUST LEOPOLD LASKA.

Witnesses:

HERMANN WEIL, OSKAR STANDHARDT.