

UNITED STATES PATENT OFFICE.

ALBERT HANNEMANN, OF BERLIN, GERMANY.

MANUFACTURE OF ASPHALT.

SPECIFICATION forming part of Letters Patent No. 598,147, dated February 1, 1898.

Application filed March 11, 1896. Serial No. 582,691. (No specimens.) Patented in Germany June 3, 1894, No. 83,550.

To all whom it may concern:

Be it known that I, ALBERT HANNEMANN, a subject of the Emperor of Germany, residing at Berlin, Germany, have invented certain
5 new and useful Improvements in the Manufacture of Asphalt, (patented in Germany June 3, 1894, No. 83,550,) of which the following is a specification.

My invention relates to a novel composition
10 of matter for and in the method of manufacturing artificial asphalt, the object being to provide an asphalt able to withstand greater pressure and of greater durability than has heretofore been obtained; and it consists in
15 the combination of the various elements and the various steps of the process hereinafter fully described and claimed.

The manufacture of cast or stamped asphalt from tar or the residues of rosin and petroleum distillation by heating the same mixed with sulfur and afterward adding burned or unburned lime or other crystalline minerals of a similar nature has not to this day resulted in attaining the object—namely, to provide
25 an asphalt able to resist a high degree of compression and of great durability.

My invention consists in treating tar, either before or after heating, with sulfur and more or less chlorid of lime at the melting temperature of the pitch. The amount of chlorid of lime must be ascertained by experiment; but from two to six per cent. is usually sufficient. The mixture is mixed with uncrystallized

lime, pulverized slags, or any other mineral of uncrystallized structure. After the addition of the uncrystallized lime, pulverized
35 slags, or other uncrystallized mineral the mass is again heated to boiling. It is then treated in the same manner as other asphalt, either cast or stamped into blocks or applied to the
40 pavement.

Numerous experiments have proved that in the manner above described I obtain an asphalt far superior in point of hardness and durability to any now in use.

I claim as my invention—

1. Artificial asphalt composed of tar mixed with sulfur, chlorid of lime, and either uncrystallized lime, pulverized slags or any other mineral of uncrystallized structure.

2. The method of manufacturing asphalt, consisting in treating tar, either before or after heating the same, with sulfur, and adding from two to six per cent. of chlorid of lime at the melting temperature of the pitch,
55 mixing the composition with either uncrystallized lime, pulverized slags or any other mineral of uncrystallized structure, and heating the entire mass to the boiling-point.

In testimony whereof I have signed my signature
60 nature in presence of two witnesses.

ALBERT HANNEMANN.

Witnesses:

GEORGE BONTZ,
G. STORCH.