

UNITED STATES PATENT OFFICE.

JOHN J. DULANY AND HENRY DREYER, OF OAKLAND, TEXAS.

IMPROVEMENT IN PROCESSES FOR DESTROYING ANTS.

Specification forming part of Letters Patent No. **144,075**, dated October 28, 1873; application filed August 30, 1873.

To all whom it may concern:

Be it known that we, JOHN J. DULANY and HENRY DREYER, of Oakland, county of Colorado and State of Texas, have invented a new and Improved Process for Destroying Ants; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification.

This invention relates to means for protecting growing crops, especially cotton, from the ants which are so destructive in some sections of the cotton-growing regions. It consists in the process hereinafter described and subsequently claimed.

First, we make a hole perpendicularly into the main cells with an earth auger, or in any other manner, ten or fifteen feet deep. This hole we fill about half full with wood or other combustible material. We now introduce a pipe, which intersects the hole about in the middle, or from five to seven feet from the surface. We now prepare any poisonous chemical compound, such as may be readily vaporized by heat.

We have found the following ingredients to be successful: One bushel of coal, which will be ignited by the wood and produce carbonic-acid gas; ninety pounds of sulphur; four

pounds of tobacco; half a pound of phosphorus; half a pound of cyanide of potassium. These ingredients are thoroughly mixed.

We now connect a bellows, by means of a flexible tube, with a pipe, and ignite the wood in the perpendicular hole, at the same time forcing in air with the bellows. When the wood is well ignited or burning, we put the above compound in the hole and tightly close it while the bellows are working. The gases generated will permeate every part of the ants' habitations, and destroy all animal life.

The cells of one of these ant-communities are connected by subterranean passages, so that by one application all the cells will be reached.

These ants commit their depredations at night. In the day-time they are housed and are readily destroyed by this process.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The process of destroying ants by blowing poisonous vapors into their cells, in the manner described.

JOHN J. DULANY.
HENRY DREYER.

Witnesses:

JOHN W. BLAKNEY,
I. F. PAYNE.