

ents a bushel for all they will collect for you, and you will soon find a cart load. There are plenty of vagabond boys in most neighborhoods who might be engaged in such a job, with profit to the community as well as to themselves and friends.

But the great difficulty is in using bones. They should not be burned, for that destroys at least seven-eighths of their real value. They should not be dissolved in ashes, for that is almost as bad as burning. They are best when ground in powder—not merely crushed into small pieces. In this form (powder) they can be put directly into the hill, or drill, with seed, or around and in contact with growing plants, without the least danger of injuring them. They furnish most excellent nutriment and stimulant to all sorts of growing crops and vegetables, no matter what the kind or variety.

The greatest difficulty lies in getting them ground, since bone-mills are scarce, and few of those in operation grind the bones *finely* enough for immediate benefit. There are few farmers in the older States who could not afford to haul bones 20 or 30 miles to have them ground, but even this is impracticable in most cases. We do not know of twenty bone-mills in the country. Some get bones pulverized in a mill used for grinding tanner's bark. One of these is better than no mill, but does not grind finely enough.

#### DISSOLVING BONES IN ACID.

A very good fertilizer may be prepared by dissolving bones in sulphuric acid, commonly called "oil of vitriol." It is a cheap liquid, nearly twice as heavy as water, and costing, by wholesale, at the manufacturers, about two cents per pound for a good article. At a distance the price is higher, proportioned to the expense of transportation. It is put up

in large glass bottles, called carboys each holding from 120 to 160 pounds. The carboys are covered with boxes or basket work to protect them, and cost from \$1 to 1.50. Sulphuric acid is a very caustic burning fluid, which will destroy the flesh or clothing wherever a drop touches. On this account great care is necessary in handling it. We knew of one severe accident from setting down the carboy to suddenly after pouring out—a portion of the liquid flew up into the operator's face. There need be no difficulty with proper care. We have used very many tons of it for sundry purposes, and have never suffered in the least. If by chance any should fly upon the skin or clothing an immediate application of water should be made. Ammonia ("hartshorn") applied afterwards, will generally restore colors changed by it. Old garments should be worn in operating with it.

To dissolve bones in sulphuric acid, choose any tight barrel or cask—an old beet barrel will do, wooden hoops are best—and put into it, by measure, two to three times as much water as you have acid to be used. Into the water in the barrel pour the acid slowly. If all be put in too quickly a great heat will be the result. The bones, broken or unbroken, can now be packed into this liquid until they rise some distance above it. Cover the barrel closely with a board, or wooden cover. The contents should be stirred with a stick, and the bones pushed down from time to time. As they gradually disappear, more bones may be added, so as to keep the liquid filled with them. In the course of four to eight weeks the acid will cease to act. If the dissolving is required to be done more speedily, the bones should be broken into small pieces with a hammer, before adding them to the acid. Some persons have tried to dissolve bones, and become dis-