

BISCUIT FODDER.

This is the name given by M. Naudin, a veterinary surgeon of the Imperial Guard, to a preparation of his invention, which has already been successfully tried in some cavalry barracks, and would seem, besides other advantages, to solve the problem which at present engrosses the attention of the agricultural world, namely, a sufficient supply of fodder for cattle in times of scarcity occasioned by drought. This biscuit fodder is composed of all kinds of substances generally given to horses and cattle—such as straw, hay, clover, oats, barley, peas, etc. To these may be added many others, such as the refuse of the wine-press, the pulp of various roots, the stalks of millet and maize, the leaves of the vine, the beet-root, and of certain trees, the sweepings of the barn and hayloft, which contain a vast quantity of nutritious matter in the flowers and seeds of hay, etc., which are generally thrown away. All these ingredients are bruised and chopped together; a mucilage of barley flower is then added, with a little salt, and the mixture is then left to itself for a few hours until a slight fermentation has set in, when it is put into square moulds, made into cakes, and left to dry in a current of warm air. In this state it may be preserved for a great length of time. When it is to be used, it is moistened with about one-fifth of its weight of water; each cake is broken into seven or eight pieces, and put into the manger or nose-bag, as the case may be. The cakes should weigh about a pound each; twenty cakes of that weight are sufficient for the daily ration of a horse. The advantages which this preparation offers are evident; mastication and digestion are rendered easier, and therefore the general health of the animal is ensured. A sufficiency of fodder can be laid in store for the winter; the rearing of cattle need not be checked for want of food, and the waste occasioned by the animals themselves while they eat at the manger, letting half their allowance fall on the floor of the stable is obviated. The cab-horse, which eats its hay on the cab-stand, often soiled with mud and filth, will find in the biscuit fodder a clean and wholesome aliment; horses conveyed on railways, and especially on board ship, can be easily fed, the stowage of a sufficient quantity of these cakes for a long voyage taking up but little space, while all danger of fire and spontaneous combustion, of so frequent an occurrence in haylofts, is completely obviated. Lastly, these cakes may be used as convenient vehicles for any kind of drugs which it may be necessary to administer.

THE ANTHRACITE COAL TRADE.

Thirty-one years ago the first coal went to Philadelphia, being ten wagon loads, hauled over the mountains by George Shoemaker, of Pottsville. Very few persons could be induced to purchase it, and most of these were wholly unsuccessful in their attempt to make it burn. Everybody considered it a mere stone. Mr. Shoemaker was denounced in all quarters as a cheat, and measures were being taken to arrest him for swindling, but he escaped arrest by leaving the city by a circuitous road, and did not stop until he had got thirty miles on his homeward journey. The most remarkable feature in this extraordinary speculation was, that Mr. Shoemaker did not himself know how to make the coal burn. He was therefore unable to convince the public that it really would ignite. Had he experimented at home, and brought with him a grate or stove in which to kindle a successful fire, the exhibition would have, no doubt, hastened full ten years the development of the coal business. He reached home disgusted at the belligerent temper of the citizens, and heart sick at the ill success of his adventure. His reputation as an honest man was rescued, however, by an iron master in Delaware county, into whose hands some of the repudiated mineral accidentally fell. He tried the coal, caused it to burn freely with an intense heat, and was so pleased with it that he proclaimed the fact in the newspapers. This led others to try, and they also succeeded. The prejudice was removed, and consumption went on from this disastrous beginning, until it at last reached the enormous quantity of 3,479,862 tons. But up to this date the depression of manufacturing has caused a reduction of 300,000 tons to be sent to market, and the whole year undoubtedly shows a falling off full 600,000 tons.—*Miner's Journal*.