Basic Slag.—Now, from all the reports we receive from thoroughly trustworthy sources in England, we are convinced that basic-slag is the true physic for all worn out clay-soils in this country: there are plenty of them. If nitrogen is to be used with the slag, it would be as well to use it in the form of nitrate of soda, as when sulphate of ammonia is mixed with it, there is a certainty of the free lime or carbonate of lime in the slag changing the sulphate of ammonia into the carbonate, whose volatile properties (smelling salts) will cause it to be lost in the air; though, if the two slag and sulphate of ammonia—be sown at intervals of a few days separately, not much loss can occur. We extract the following from the "English Agricultural Gazette:"

Despite the fact that basic slag seems to set some of the teachings of scientific experts at defiance, I am bound to bear my testimony to the marvellous results which have followed its use on many farms.

Having always been a believer in the theory that phosphorus was ineffective as a plant food, unless in conjunction with potash and nitrogen, I could not understand how a dressing of basic slag alone, which contains neither of the latter substances, could prove beneficial. Nor yet, holding the opinion that plants can only assimilate soluble elements, could I realise how the insoluble phosphates of the slag, rendered more insoluble by the presence of lime, could afford them nutrition. But an invitation to visit a number of farms where basic slag had been used completely upset my previous theories, and convinced me that both on arable and pasture lands the use of the genuine phosphate powder had been followed by really marvellous results.

It was upon the thin-skinned, naturally poor and harsh, almost unworkable clays where it had answered best, and in the course of two days' investigations over a large tract of country I saw throughout a marked difference in the barley and wheat crops where it had been used, and upon some of the poverty-stricken pasture lands, where the undre-sed portion would scarcely graze a goose, the portion dressed with sl g was a luxurious bed of white clover, plenty of it fit for mowing, the difference in one large field from which the cattle had been drawn about a month between the dressed and undressed parts being almost incredible. It was much the same in almost every field I entered, and, as said before, it was the poor clays in every case that had benefited most, so that it appears as if the occupiers of such land had in basic slag a most valuable aid to prosperity. The cattle, too, evidenced their preference for the pasture dressed with it, so that, starting from home somewhat prejudiced against it. I returned thoroughly assured of its great value as a manurial agent, though I cannot recommend it to be used at the same time as sulphate of ammonia.

## THE FLOCK

HAMPSHIRE DOWNS.—T. N.—In the Hampshire Down Flock Book the following note on the chief points of the breed are given :—A long, deep, and symmetrical carcase, with the rib well sprung; brond, straight back, flat loins, full dock wide rump, deep and heavily developed legs of mutton and breast, head and neck well placed on gradually sloping and close-fitting shoulders, the neck being particularly of a strong muscular growth, and not too long, the ears nicely set on, of fair length, and whole coloured; prominent, intelligent eye; the body as above described standing on strongly-jointed and powerful legs, with good feet presenting a smart and active appearance. The colour of the face, checks, ears, and legs should be of a rich dark brown. approaching to black, white specks or black bars between the ears being specially avoided. The wool is moderate in length, of close and fine texture, reaching well over the forehead, the skin being of a delicate tint; the average weight of the fleece is 4½ lb to 5 lb, of washed wool.

In the reports of the sales and lettings of sheep for 1897, it may surprise some people