

to allow the hestial to reach the pasture. The covering is then applied to another portion of the field; the operation of removal and covering being repeated so long as the straw or hay remains sufficiently entire to admit of convenient application. The merits of the system, which is yet in its infancy, was thus stated by Mr. Gurney at a late meeting of the East Cornwall Experimental Club:—"About seven weeks since he had covered half a field of grass of three acres in this manner, and about a fortnight ago, when examined, the increase had been found to be at the rate of 5,600 lbs. per acre over the uncovered portion of the field. At that time the straw was raked off and laid in rows 12 feet apart on the field, and 115 sheep were put on the grass, with a view to eat it down as quickly as possible. After they had been there about a week they were succeeded by 26 bullocks, to eat off the long grass remaining, and which the sheep had left. The field was thus grazed as bare as possible. The same straw was now again thrown over the same portion of the field from which it had been raked; and on inspection that morning he had found the action going on as powerfully as on the former occasion. He thought the sheep, on first raking off the straw, were not so fond of the grass as they were of that uncovered; but after 21 hours' exposure to the sun and air he thought they rather preferred it. He had 40 acres now under the operation, and in consequence of it he had grass when his neighbours had none." Fibrous covering, or Gurneyism, as thus described, is certainly a cheap and convenient mode of manuring; all that is wanted is only further experiment to test its general applicability.

NEVER-FAILING RECIPES FOR SOAP.

SOFT SOAP.—To 25 lbs. of clean fat, add 16 lbs. potash dissolved in four buckets of water, and boil it until the fat is entirely destroyed. This you must test by taking out some of the soap in a clean cup, add a little water, and let it stand to cool. If the soap becomes thicker and clearer by the addition of water, and continues so, the soap is done; but should it become thinner or whitish, the ley has not combined sufficiently with the fat, and the boiling must continue until it will bear the water test. When it has arrived at this point, add water until it becomes a thick jelly; then let it boil one hour slowly, when it will be finished and fit to be barrelled. The most frequent cause of failure is, that the ley is not strong enough for the quantity of fat; therefore, when home made ley is used instead of potash, the ley should be strong enough to float an egg freely. To each gallon of strong ley add three quarters of a pound of clean grease; if crackles be used, take one pound to each gallon. Boil it very fast, and stir frequently. A few hours will suffice to make it good soap.

HARD SOAP.—Add salt in proportion of one pint to three gallons, let it boil a few minutes, and put it in tubs to cool. Should the soap be thin, try it in a cup if it requires water. If very strong ley be used, water is necessary to thicken it after the incorporation is complete; this must be done before the salt is added. Next day, cut out the soap, melt it, and cool it again; this takes out all the ley, and keeps it from shrinking when dried. The fat should be prepared before soap-making day, by boiling it in clear water and straining out all the bones and flesh, as they give out but little grease and always make the soap impure. Be careful to save the bones and scraps thus left, as they form the best manure for rose bushes, flowering shrubs, and peach trees.

THE CORN CROPS OF EUROPE.

We extract from the *Gazette d'Augsburg* the following article on the crops of 1845 in Europe:—

"According to the custom we have adopted, we shall divide our account of the results of the last crop into two parts—one referring to the east, and the other to the west of Europe. For several years past the east threatened us with sterility; it first of all began in Russia, spread over Poland and Prussia, and appeared even this year likely to diffuse itself in the east of Germany. Experience has

generally proved that in the boreal latitude the rainy years are more sterile than the dry ones. This fact has again been confirmed during the last year. It was humidity that diminished the crops a few years ago in Russia, and which produced the like effect in Poland, Galicia, and Upper Silesia, in the course of last year. In Germany the humidity has not produced any unfavourable consequences, but in certain countries; there are others, on the contrary, which have suffered from want of rain. The results of the crops are, in the main time, far from being satisfactory, and, from the calculations which have been made, will not suffice the public consumption.

"It is far from our intention to represent the situation of things in more dreary colours than belongs to it; but we do not wish, and we ought not to exaggerate the advantages of it, desirous as we are of attaining our present object which is to furnish an exact appreciation of actual circumstances. We shall separately name the different countries, and indicate the supplies they stand in need or can dispose of.

"Russia will have sufficient corn for the whole empire, without purchasing any foreign corn. Its Governments are in a position to assist mutually each other, but it is very doubtful whether they can send much corn abroad.

"The crops of Poland are not sufficient for its general consumption; and unless it has been previously supplied, will suffer from a scarcity, or be obliged to receive corn from abroad. But whom can one have recourse to when one's neighbours have only had themselves but middling crops, and have not wherewith to supply the deficiency? Money also is scarce in Poland, and important sums cannot be sent abroad to purchase corn.

"The kingdom of Prussia has greatly suffered last year and this from inundations, which have ravaged seriously its most fertile countries; and want, which is generally felt there, is on the point of transforming itself into actual famine.

"The news from Pomerania agrees in stating that the result of the last crops are very mediocre.

"In the Grand Duchy of Posen only a middling crop has been obtained, and anterior provisions can alone prevent a scarcity. The author does not remember having heard such enormous and general complaints, unless it be in the years 1801 and 1817. God grant that the unfortunate events of that epoch be not again reproduced! There are in this province whole countries where the usual corn sellers will be obliged themselves to make purchases the next spring. The situation of Galicia is still worse. The price of rye rose to 60 per cent. immediately after the crops; it is still on the rise.

"In Hungary, which is usually so productive, the Government has been obliged to lay in large stores of corn to prevent a famine. The hope entertained of having good crops has been still more cruelly disappointed than in Silesia.

"In Austria, Moravia, and Bohemia, the results of this year's crop are below those of the average ones, and must scarcely suffice for the general consumption.

"If we consider the west of Germany, we find, first of all, that the crops in Saxony have not precisely failed, although they are very far from being abundant. The same may be said of the provinces of Brandenburg and of Magdeburg.

"Bavaria, like other countries, has suffered greatly this year from hailstorms and water spouts; the results of the crops have in consequence been diminished, as likewise by the state of the atmosphere, which has hewn itself but little favourable to the cultivation of corn.

"Wurttemberg, the country of Baden, Westphalia, and the Rheinish provinces, have been better treated; but the disease which has ravaged the potato crop will be severely felt. Nevertheless, the potato crop has been generally good throughout Western Germany; it will supply many deficiencies in the crops of other places,