

ach of a single whale, no less than six hundred herrings are said to have been found.—*New England Farmer*.

Is the Cattle Plague Small-pox?

The London *Lancet* contains the following:—
“The report of Dr. Murchison’s dissections of the diseased cattle, which appeared in the *Lancet* as long ago as August 26th, showed clearly that the rinderpest was not the pathological equivalent of human typhoid fever, and we believe we are correct in stating that this opinion has been confirmed by every subsequent observer. From Dr. Murchison’s present communication, however, it is obvious that there exists a very strong analogy, if not absolute identity, between the rinderpest and small-pox. The arguments by which this view is supported, deserve serious consideration. It appears that in all cases of cattle plague there is an eruption on the skin, sometimes popular and pustular, like that of variola; at other times consisting of flattened vesicles like those of cowpox. The two diseases also resemble one another in their general systems and anatomical lesions, in their period of incubation and duration, and in their extreme contagiousness and capability of propagation by inoculation. There are even some grounds for believing that rinderpest may communicate cow-pox to the human subject, and the reason why this accident has not happened oftener may be due, as Dr. Murchison suggests, to the fact that most of the inhabitants of this country are protected by vaccination.

“It also appears that the physicians who so carefully described the cattle plague in the last century constantly alluded to the eruption, and compared it to that of small-pox. If the view now referred to be correct, it is impossible to overestimate its importance. A remedy is at once placed in our hands for arresting the spread of the cattle plague, which has already come to be regarded as a great national calamity. We prevent the fatal form of small-pox in the human subject by inducing a mild form of the disease through vaccination. If rinderpest be a severe form of small-pox in cattle, why may it not also be prevented by inducing in cattle the mild form of the disease, or ordinary cow-pox? This we know can be done by inoculating them with vaccine lymph, or with the matter of human small-pox.

“No time ought to be lost in adopting Dr. Murchison’s suggestions, to ascertain whether cattle, after such inoculations, be proof against the rinderpest. In the meantime valuable information might be obtained from members of our profession practising in those parts of the country where ordinary cow-pox is known to prevail. Many remarkable instances have been recorded where individual cattle or entire herds have escaped in the midst of surrounding pestilence. Can it be shown, this exemption has been due to their having suffered previously from the cow-pox? It seems, however, that the ordinary cow-pox has for some years been dying out in this country, so that it has been difficult to obtain fresh lymph direct from the cow, and thus the cattle of this country are probably less protected than formerly against the variola in a severe form. If this be so, there is no reason why vaccination should not be practised as com-

monly among cattle as among men. The above investigations have been carried out in connection with the experimental inquiries instituted at the instance of the medical committee of the Cattle Plague Commission. Their former recommendation as to the arrest of traffic in cattle, is now being urgently pressed on the Government by the farmers at large; and if the views enunciated by Dr. Murchison should prove correct, the value of the service of the Royal Commission will be of the highest national importance.”

It appears by the *Mark Lane Express*, that Dr. Parsons, after devoting much time to the study of this disease, has arrived at similar conclusions to Dr. Murchison. It must be said, however, that the correctness of these conclusions are disputed by many others; and that although vaccination has apparently succeeded in some cases, it has in others entirely failed. The true character of the disease has yet to be discovered.

Concentrated Beef.

After many years of persevering effort, and the expenditure of many thousand dollars, Mr. Gail Borden has at last succeeded in producing an extract of beef that is not only nourishing but palatable. We have before us a specimen of this extract; it closely resembles a piece of erasing india-rubber. This specimen is about $2\frac{1}{2}$ inches in length, $1\frac{1}{2}$ inches in width, and $\frac{3}{4}$ ths of an inch in thickness, and it weighs 4 oz.; the price of it at retail is 75 cents—equal to \$3 per pound. At the present cost of production the article is expected to come into use only for making beef tea for invalids; but after a market is opened, establishments for its preparation will be erected in Texas and other cattle-grazing localities, where beef is cheap, and it will probably be brought into general use for making soups, etc.

At the present time there is only one establishment in operation, that is at Elgin, Illinois, 42 miles N. W. from Chicago. Beeves, fresh from the pastures and stalls, are killed, the meat is macerated in boiling water, care being taken to avoid ebullition which would carry off some of the most savory and nutritious elements; the extract is then concentrated in a vacuum pan to a very thick jelly; and the drying is completed by a process that, for the present is kept secret.

The perfect extract is rolled and cut into the form described, and wrapped in paper that has been saturated with paraffine. Paraffine being tasteless and inodorous, exerting no chemical action, and being impervious to air and moisture, is an admirable substance for this purpose, and may be profitably employed for a great variety of manufactures, where it is desirable to keep the product from the atmosphere.

The establishment at Elgin is capable of reducing the carcasses of eight beeves per day; from 100 lbs. of meat $4\frac{1}{2}$ lbs. of extract are obtained. Mr. Borden claims to get all the albumen, and everything but the fiber. He says that farmers who have given the substance remaining to their hogs, affirm that the swine refuse to eat it, and that it is worthless for purposes of food for any animals. The gelatine is not included in the extract; it is well known that substance is all eliminated by the kidneys without imparting nutriment to the system.