watery food. Water is not so much added to e milk, after it is drawn off from the animal, it is incorporated with the milk in the system fore. It is well known that food which con- ns lactic acid has a tendency to produce an ndance of milk; and when animals are fed h concentrated food, such as bean-meal or e, it may perhaps be advisable, in the absence brewer's grains or distillery refuse—two terials which contain lactic acid—to generate e lactic acid by keeping barley meal for some e in contact with water, and letting it slightly ment, perhaps with some vegetable refuse tter, which has a tendency to hasten the mation of lactic acid from barley meal. By g this, I am inclined to think that concen- ted food, like cotton cake, bean-meal, or rape- e, would be rendered more digestible, and re readily made available for the production milk of a good character. Time does not mit me to speak in detail of the influence of various kinds of food upon the quality of milk; and I purposely cut it short, in order t, if some spare time is left, those who are ctically better acquainted with the subject o I am may have an opportunity of throwing some hints, and perhaps of opening up a e discussion respecting it. What time I have my disposal I hope to fill up usefully by ecting your attention to the mode of testing quality of milk.

(To be concluded in our next)

On Steam Cultivation—its rise and Progress.

A very interesting paper on this subject was d at a recent meeting of the London Far- s' Club, in England, by Mr James Howard, celebrated Implement Maker, of Bedford. following paragraphs give the substance of communication, which will not be devoid of rest to our readers generally.—Eds.

fluence of Steam Power.—It may appear thing, but 'tis no less true, that to the dis- ery of the steam engine, more than to any r cause, this country owes its great wealth, anufacturing greatness, and the means of porting its abundant population.

Until the discovery of this mighty agent, population and the wealth of England were pt at a stand still. So lately as 1780 we numbered 8 millions; and 200 years be- the population was 6½ millions. No sooner ever, was the steam engine fairly brought use than that wonderful expansion of our merce commenced, which brought with it a sponding increase in population, and which made England the great mart of the world. quick processes, and rapid results of the fac- tory have of late years been imported into the threshing of our crops; no wonder, then, that the farmer has begun to regard the ploughing of his land by-horse-power as a slow and tedious operation, and has become desirous of introducing into his fields the same despatch and the same powerful agency he has found of so much advantage in the preparation of his grain for market."

History—Although, until a recent period, public attention had hardly been turned to the question, steam ploughing is by no means a new subject.

"(1) As long ago as 1618, one David Ramsey and a Thomas Wildgoose obtained a patent for 'Newe, apte, or compendious formes or kinds of engines or instruments, and other p'fitable invencons, wayes, and meanes, for the good of our Commonwealth, as well as to ploughe grounde without horses or oxen, and to enrich and make better and more fertile, as well barren peate, salte, and sea sande, as inland and uplande grounde, within our Kingdomes of England and Ireland, and our Domynyon of Wales; as alsoe * * * * to make boates for the carriage of burthens and passengers ruun vpon the water as swifte in calmes, and more s.ff in storms, then boates full sayled in great wynes

"(2) In the same year that Ramsey took out his last patent, a William Parham and others had a patent granted for a 'certain newe and readie waye for the good of our Commonwealth, for the earinge and plowinge of lands of what kind soever, without the vse or helpe of horses or oxen, by meanee of an engine, by them newly invented and framed.'

"(3) About 40 years after Ramsey and Wildgoose, another genius arose, named Francis Moore. who took out no less than three patents, having for their object 'the dispensing with animal power in tillage, navigation, &c., &c. Mr. Moore states, 'his machine to go without horses.' 'Tis recorded in a periodical of the day that Mr. Moore had such faith in his inventions that he not only sold his own horses, but by his advice many of his friends imitated his example, fearing their value would be affected by the general introduction of his machine.

"(4) About the same time, 1770. another inventor appeared, a Mr. Richard L. Edgeworth, who patented an engine with an 'endless railway,' almost identical with that patented by the late lamented Mr. Boydell.

"(5) In 1810, in which year a Major Pratt obtained letters patent for a steam ploughing apparatus. One of his schemes was to place the engine and anchor on opposite headlands, or in boats, as Mac Rae's. The implement described by Major Pratt may be regarded as the first 'balance plough,' the ploughs being placed back to back, or heel to heel, and working on a fulcrum in the frame, one set being thereby raised out of work while the other set was lowered into work.