

CHRISTMAS CHEER.

The citizens of Halifax do not entirely eschew good living at this season of the year. Such, at least, is likely to be the belief of the Goose and Turkey population of the Province, if any living witnesses have been left behind. It is not an uncommon custom in the cities of Great Britain for a number of gentlemen and dealers to form what is called a Christmas Club, the object of which is to organize a small Christmas Exhibition of Fat Cattle, Poultry, &c. The prizes are few but sufficiently large to bring forward what is wanted. The poultry may be exhibited alive or dressed ready for cooking. The result is that the very best animals are brought prominently before the public, the farmers are stimulated to improve their Christmas produce, and bring it into the city in a nice tidy condition, scare-crows entirely disappear from the market. Reader, if you are a *bon vivant*, talk over this matter at your New Year's dinner table, with a view to discover whether the practice might not be imported advantageously, like mistletoe and holly, into the city of Halifax.

THE PLOUGH IN THEORY AND PRACTICE.

Some have condemned the plow utterly, as an old and effete implement, as performing work the very opposite in character of that which is required, and have discarded it as much as possible from their practice. On the other hand, there are those who praise the plow as the perfection of an implement; that the work it does is not only precisely the kind of work which is wanted, but that it does that work in the best possible way. They look upon it, in fact, as the king of implements, and, as king, it will therefore never die. Much may be said on both sides, and we shrewdly suspect that in this, as in other much disputed questions, the truth lies in the happy line equidistant between the two extremes. Questionless, if we examine a plough in work, and know the work which it is designed to do, it is not possible to do ought else than admire, and admire greatly, the beautiful precision of its operation. In view, indeed, of this—and it is observable in an eminent degree of the fine implements of modern makers—we scarcely can wonder at the enthusiasm with which the plough is considered by many, and at their belief that it will never be supersed-

ed. But, on the other hand, we do find in practice the plough has defects also, which are inherent in it, and which, therefore, can never be remedied by any attempts at alteration in the plough itself. We know, moreover, that—despite the opinion that many have so persistently proclaimed, that there is no implement save the plow by which the soil can be prepared for the crops which it is to bear—that the soil is, nevertheless, in practice so prepared by implements other than the plough, and that examples of splendidly cultivated fields exist, which for years have not been touched by the plough.

The consequence is, that a vast amount of interest centres around the plough, making everything which ministers to a knowledge of its past history, present position, and future prospects, sought after with avidity and treasured up with care. Hence, we believe we shall be doing our readers a service—as we frankly confess we shall be doing ourselves a pleasure in performing it—if we take up the plough, as the subject of a series of papers to be regularly continued, considering it under the aspects named above. In so considering, it will be necessary to go back to some of the exhibitions of the past; and this retrospect, from what we know of it, will result, we venture to think, in much that is at once interesting and instructive. We propose to concern ourselves almost solely with the history of practical details and improvements on the plough, so that our readers can trace, if they please to do so, the steps—or some of them at least, and these the most important—by which the plough has reached the position which it now occupies.

It was from the Low Countries, or the Netherlands, that we obtained the plough possessed of all its modern features—namely, the sock or share, the coulter, and the mould-board. The plough was introduced from Flanders was for a long time known as the Rotherham or Dutch plough, and made its first habitat in Lincolnshire, to which it was introduced by the Dutch engineers, who at that period were largely employed in the drainage of these districts.

Possessing, then, all the features of the modern plough, all succeeding improvements made on it consisted merely in giving these features the highest development as regards position and form. This development went on very slowly till a Scotch mechanic, of the name of James Small, took the matter in hand, whose patient investigation made the plough the implement which we now see it, a thoroughly efficient one—the work of which could be depended upon as being likely to be done with precision. The use of cast-iron was greatly extended about the period at which Small com-

menced his investigation into the plough; and the use of this material enabled him to reproduce the most essential part of the plough—namely, the mould-board—so cheaply that it was not worth the while of any mechanic to copy it in wood, the material, as may be gathered from the name, in which up to this date the mould-board was made; hence the chances of change in the form decided by Small were lessened, and indeed so much obviated, that the form once introduced remained as the model for succeeding ploughs.

In tracing the practical development of the plough it will be well, at the outset, to describe very briefly the work which it has to perform. In doing this, we shall, of necessity, have to go over ground with which many, if not nearly all our readers are familiar; but those must overlook this, in consideration of the fact that what may be well known to them may be and is by no means well known, if known at all, to others; while even to those who are of the knowing class something may be said, if not directly yet of suggestive practical value, in thus running over the salient features of the work which a modern plough has to perform.

The first work which the plough does is to cut off, from the earth or soil a slice of a determinate form, generally rectangular, and the second is the turning over of this slice, in such a way that its position is inverted. The side which formed at the beginning of the process the upper surface or side, being the lowest or covered up side at the end of it. Strictly speaking these two operations, the cutting off the slice of soil and turning it over, are—at least after the plough has begun its work—done simultaneously.

In plowing there is a slice about 10 inches wide by 7 deep to be cut from the soil; the uncut earth, is called the land side. The part of the plough which is known as the "coulter" effects the severance of the slice at the land side, making a cut more or less vertical, while the "sock" or "share" effects the severance of the slice from the ground in a horizontal direction. This horizontal cut is not completely made, but a part of the slice is left uncut, so as to give a point of leverage, so to speak, to the "mould-board," the office of which is to turn over or invert the slice, as the plough moves along, the face or outer portion of the mould-board being made or formed with a varying curve (of which more hereafter), which curve gives the desired movement to the slice as it slides along and over the surface, till it is finally deposited, on its leaving the mould-board, at a determinate angle. The slice cut off from the fixed soil, vertically by the coulter, and horizontally by the share as it passes along the surface of the mould-