## The Application of the Manure of the Farm.

## BY PROFESSOR TANNER.

The judicions employment of the manure of the farm can scarcely be looked upon as of less montance than its economical production; and then we consider the influence that this fertilizen as upon the produce, and consequently upon be profits, of the farm, we have a strong induceent to give the matter our careful attention. or this purpose it will be advisable to treat the abject under two distinct heads, according as the nimal excreta may or may not be intermixed ith straw.

## AS3 I.-ANINAL MANURES, INTERMIXED WITH STRAW.

This includes the most expensive manures hich are produced upon our forms. We have that heterogeneous mass so familiarly known farm-fard manure the great representative of is class. The evidence of practice is agreed presting its real value, and the improvements hich have been introduced into agricultural actice have a powerful and direct tendency to crease the quantity and improve the quality of a product of the farm. Our attention has at to be directed to a subsequent stage—its apiestion to the land.

If we appeal to practice alone for an answer the question before us, viz., What is the best not of the rotation and the best time of the or for applying the manure of the farm ? it lat first sight appear almost impossible to it such a reply as will enable us to esish any definite rules, in consequence of the ly varying customs of different districts .this want of agreement need not cause us chsurprise; for it is clear that as the conions of soil and climate vary they must be met wresponding modification in our practice .-- | anot know any branch of farm management which the truth of this principle is more evatthan in the use of dung. There is scarcely crop for which farm-yard manure has not been with advantage; and throughout every ath of the year we have instances of its suc-fel application. In explaining and justifying diversity of usage, we must take the result meesful practice as our primary guide; for nce can rarely do more than explain the ts of a success already achieved, and cannot recognized as an independent authority .agupon this principle, we will first notice-

## PRACTICE OF APPLYING DUNG TO OUR HEAVY JUS, SUCH AS CLAYS AND CLAY LOAMS.

"allows.--On clay soils the manure is com-Japplied to the fallows, and my own exnee leads me to consider this to be a judicimatice. If, in some cases, lime is used as kitute for dung, this w ll arise rather the difficulties of providing an adequate

supply of the latter than from choice. Tle combined, or rather consecutive, use of the two substarces will generally be found highly beneficial. The time for applying the dung will depend upon the condition of the land, as well as upon the other and more urgent demands both on the supply of manure and the horse-power of the farm. After the cultivation of the wheat and beancrop has been attended to, the fallow land and that under preparation for roots will demand attention; so that however desirable the autumn application of manure to the summer fallows may be in an abstract point of view, practically these fields will rarely be clean enough to warrant this proceeding, even if manure can be spared for the purpose. It is clearly impolitic to lay on dung in the autumn or early winter, unless we have been able to conquer the weeds, which, if undisturbed, would gain strength and ascendancy Moreover, exfrom this supply of nutriment. cept in those few instances in which stall-feeding during the summer is carried out, the autumn stock of manure will be the product of the previous spring, and consequently become thoroughly rotten, and for this reason be less valuable for the fallow ground than for a crop. The condition of the dung has an intimate connection with its applicati n, and the question may fairly be asked, Whether the condition must not regulate the time of its application? To which we. however, reply that this condition is under our control, and may be made to accomodate itself to the general economy of the farm.

Throughout the management of a fallow two objects have to be kept in view :-- 1st, The improvement of the texture of the soil, so as to fit it for the growth and extention of the crop; and 2ndly, The liberation and development of feitilizing matter for the nourishment of the plant. The strong soils upon which alone fallows have been found desirable are so close and retentive in their chaarcter that there ... some difficulty in preserving a free passage for roots. This importadt mechanical condition of the soil is attained by various tillage operations, which we denominate fallowing, as well as by the use of It will be evident, upon a moment's manure. consideration, that the less decayed the dung may be, the greater will be its firmness and rigidity, and consequently the mechanical influence which it is capable of exerting upon the soil will be in the same proportion. Thus, when fresh dung is ploughed into a strong clay soil, it offers a certain amount of resistance to its particles, again returning to their former close and adhesive condition; whereas, if thoroughly rotten manure were used, it could offer no resistance, but the entire mass would again become compact. In the latter case, the soil is enriched, but no additional facitity is given to the roots to obtain the supplies which are added for promoting the growth of the next crop; in the former instance the fresh manure adds food for the crop and offers facilities for its use.

We have other reasons which favour the ap-