Iowa.—The accounts from the centre of the State in regard to the wheat crop are very gloomy. The crop will hardly average ten bushels to the acre. Oats are generally a failure.

ILLINOIS.—In Southern Illinois the yield of wheat is about a fair average, rather under than over. The winter wheat has been generally successful, and spring wheat the reverse. In other parts of the State the yield will not be over half the usual crop.

INDIANA.--In Indiana the yield of wheat has been from one-half to two-thirds the average crop.

MINNESOTA.—The yield of wheat in this State is of better quality than usual, and in quantity nearly two thirds of their usual crop.

MIOMGAN.—The yield of wheat in Michigan is over two-thirds an average crop, and generally of good quality.

WISCONSIN.—The crop of wheat is up to the average, but the greater extent in cultivation compensating for any deficiency in the yield per acre.—N. Y. Courier and Enquirer.

## IMPLEMENTS AT THE CHESTER MEETING OF THE ROYAL AGRICULTURAL SOCIETY, ENGLAND.

## (Continued from July number.)

## PORTABLE ENGINES.

The trial of the portable engines occupied several days, and was as severe in its conditions as the society could possibly impose upon this class of machinery. As the trial moreover, was triennial, according to the rules of the society, as suggested by the implement makers themselves, the results were looked forward to with more than ordinary interest, and awakened great excitement during their The last trial of portable engines took place at Carlisle, when Messrs. prògress. Tuxford were the victors, as they are on the present occasion. The conditions of trial imposed by the society were framed especially to obviate the production of what are fairly termed "racing engines;" that it has been thoroughly successful on the present occasion we have no reason to doubt. At all events, it has secured the construction of simpler, and, we presume, more useful engines. such as the farmer can safely and practically work, without the approhension of their being continually subject to the engineer's repairing powers.

The plan for testing the engines was to allot 14 lbs. of coal to the horse-power of each engine, so that an eight-horse engine had 112 lbs. of coal, and others in The coal, however, was not of so good a quality as that the same proportion. used at Carlisle, owing, in all probability, to its being supplied direct from the colliery in Wales, instead of from London, as heretofore, the latter market always securing the best quality. The steam was raised to the working pressure of 45 lbs. to the square inch. The time and the consumption of fuel were accu-rately noted, and the engine, after working for a short time, was left to coel The working parts of the engine were then taken to pieces, and the down. piston, slide, expansion, valve, and pump valves were examined by the judges; the engine then performed what is called its "duty," which is expressed by the work done in a given time by a certain weight of coal. The decision of the judges is determined, mainly, by "the simplicity of construction and probable durability of the engine considered as a whole and in detail, its portability, the cconomy of its working power, and the price." The power of the engine is ascertained by a "friction break," which resists the rotation of a drum, driven by the engine strap, and adjusted to the motion required; while the weight sustained is multiplied by the velocity of the periphery of the drum, which repre-sents the power of the engine. The "duty," therefore, of an engine is the