

natural, founded in the highest wisdom, policy, and humanity, dictated by principles of self-preservation, and exempt from the most distant imputation of severity or unjustifiable caution.

Whatever further information I may be able to obtain, shall be duly communicated to your Lordship; and if your Lordship should think it expedient to order proper glasses and instruments to be sent, with fit directions how to proceed, in order to make the necessary discovery, they shall be most carefully pursued, and with that caution which the present jealousy of the country, in a matter so essentially affecting its commerce, requires.

With sentiments of profound respect,
I have the honour to be, &c.

P. BOND.

The most important of the enclosures are as follows:

Information collected by Mr. Bond.

A farmer, in the county of Chester, of the name of Ports, stacked his wheat, of the growth of the last harvest (1788) at which time the Hessian fly had not been seen in or near that county; about six or seven weeks after the harvest, he had occasion to thresh some of his wheat, and, with a view of preventing its scattering and wasting, he threw the sheaves from the rick upon a large sheet: When he took up the sheaves, to carry them to the threshing-floor, he perceived a great number of flies, answering precisely the description of the Hessian fly, lying upon the sheet, some dead, and others in a torpid state; from whence he concluded the fly had got a footing in his rick; but from any examination, either of the straw or grain, no trace of the eggs being deposited was discovered.

About the 16th of August last, another farmer, of the name of Cleaver, in the same county, apprehending the fly might approach his neighbourhood this season, sowed some wheat in his garden; it grew so as to appear above the ground in less than a fortnight, when a violent north-east wind came on, and immediately afterwards he perceived small clouds of flies over and about the wheat he had sown. In a few days he examined the wheat, and found numbers of the flies had deposited their eggs in the heart of the main stalk, and many of the flies lay dead on the ground where the wheat was sown, and near it. From this farmer's observation, the flies must have entered the stalk at a very critical time, viz. while it was in that state that there was an opening at the head of it, which enabled the flies to pass

into the stalk and deposit their eggs in the heart of it: This opening would have been totally closed in the course of another fortnight's growth, so as to have resisted effectually the entrance of the flies into the stalk. Many of the eggs were found in the stalk, and some small white worms, produced from other eggs, were lately discovered in the stalk, very near the root of the wheat; wherever these worms were found, the whole of the individual stalk was perceptibly changed, in point of colour, tending to a yellowish cast, the top hanging down quite shrunk and withered.

In some of the blades of this wheat, which I picked and examined, I could perceive, upon minute examination, the eggs carefully deposited within the stalk, of a very small size, of a whitish colour, rather of a yellow tinge. Where the worm was formed, it was carefully wrapt up, surrounded by different coats of the sheath in which it lay, as if it had been skilfully and tenderly rolled up for its preservation; around it the stalk was plainly eaten away, some nearly through. The worm strongly resembles the skipper in cheese, somewhat thinner and rather longer, of a whitish cast.

Mr. Jacobs, a man of reputation, and a considerable farmer, in the county of Montgomery, went, in company with Mr. Vaux, to enquire into the effects of the Hessian fly, in New Jersey and Long Island; and they have published their remarks in several of the Pennsylvania newspapers; he gives precisely the same account of the egg and of the worm, as they are described in the last page; he has not yet seen the insect in its fly state. From his observation, the egg is generally deposited in the sheath or funnel, a little above the first joint; when the eggs are laid in the autumn or spring, they are utterly destructive of the growth of the wheat; but when they are deposited shortly before the harvest, the grain, or even the stalk, is scarcely affected, especially in rich ground. He is convinced this insect bears no resemblance to the weevil in the southern parts of America, and that its egg is not deposited in the grain at all, but in the sheath or funnel generally, and sometimes on the outside of the stalk: The egg, he says, at first is very minute; it grows rapidly, becomes full and large, then turns to a brown hue, and in size and colour is very like a flax-seed. He has a thorough confidence, that the yellow-headed wheat will withstand the attack of the fly; and thinks rolling and feeding the wheat of immense service.

(To be concluded in our next.)