

management, but appoints as manager one of the scutchers themselves. By this means the most valuable portion of our produce is put into the hands of the most uneducated portion of the community, and the farmer is left entirely at their mercy. Now, after twenty years of close and unremitting attention to flax scutching, I can unhesitatingly state, that from £3 to £4 per acre is lost to the farmer by *hurried* and slovenly scutching. There is, in addition to this, another great mistake from the state in which the farmer brings his flax to the mill, often in so damp condition that it is ruinous to scutch it. On this point I have had some hundreds of experiments, and all were in favour of flax being scutched in a dry state. In some instances the loss is to an extent almost incredible, some lots giving double the amount of fibre when dry than when in a damp state, and the quality is greatly improved. I therefore hold that there are great waste and loss, and one of the chief causes of bad scutching, by putting into the scutchers' hands flax in a damp state. There should be a means of drying all flax scutched in the winter months, and steam is the only safe drying, all other means being either injurious to flax or dangerous as to fire.

I particularly wish to call the attention of flax-spinners to the plan of drying the flax by steam, as not only quality, but quantity is improved, and that to an extent they would scarcely credit. However, should they have any doubt, by sending a deputation of two or more flax-buyers, to my mills, I will let them see a series of experiments that will convince them that steam-drying of flax is a great improvement in every way. Now, every means should be resorted to that would either improve quantity or quality in these days of want of cotton. Spinners should be the first to set the example, and let them begin where the Royal Flax Society left off, namely, at the scutch mills. The farmers have been very well instructed how to do their part to flax; it is only when it comes to the mills that there is a want of skill and care. I would therefore say that the spinners, as a body, should form a society or committee, and erect one or more model scutch mills, and experiment on them, giving to the country the benefit of experiments, and also training young men and fitting them to take management elsewhere through the kingdom, as the want of such is a great drawback. Many new districts would commence growing flax were there a facility of obtaining such skill. Every young man should be able to superintend the erection of the scutching department of a mill, as also to train scutchers, &c., &c. With such facilities many new districts would commence flax culture. It is now quite evident that machine scutching will not supersede the established system. The present scutch mill, when well fitted up and in good working trim, is in

itself an admirable machine, and well adapted to take the shoves out of flax. Its action cannot be excelled; and when we add to that a well-trained scutcher, I would say that as long as he does his part well, no machine will be able to compete with it. I have had many experiments on this, having invented the first cylindrical scutching machine, which obtained a medal at the Dublin Exhibition some ten years ago. In course of inventing this machine I had many experiments with the present system, and invariably found that a well-ordered mill and a good scutcher could come out with long odds. We should, therefore, look after and try to improve what experience teaches us is the best machine. To do so we should have the flax brought into a suitable state by *steam* drying, (none other being so safe or so good). It will then be in a fit state for the scutcher. In fact none but those who have seen it can imagine the difference there is in scutching a dry, as compared with a damp, strick of flax; and all the fine flax is as much improved in quality as quantity. When prepared in this way with steam drying, and carefully put through our patent rollers, then it is fit to be put into the scutchers' hands, but not before. The scutcher should have a well ordered stock or stand, with eight wipers or knives on a rim of four feet diameter, the wipers being ten inches projecting from the rim and nine inches broad, and travelling at a speed of about 200 revolutions per minute, being the maximum speed, and ranging from that down, according to the quality and firmness of fibre. Now, I hold that such a machine has not hitherto been equalled for scutching our Irish flax—for refining the fibre and preparing it for the spinner. I have minutely examined all the processes that flax goes through preparatory to spinning, and unhesitatingly state that the scutch-mill is the place to take out the shoves and refine the fibre with the greatest saving for both quantity and quality (always supposing the scutcher to do his duty). Let, therefore, one or more model scutch mills be erected on these principles, which I will explain (if required) more minutely and accurately, and managed on the rules I have stated, and I will guarantee a vast saving of flax to the country, as well as greatly extended culture. The flax fabric will now be called in to make up the void of cotton; hence the present is the most fitting time to develop flax culture and management, that it may not again lose the place it is now likely to take. Should any nobleman or society take up the subject, I will feel pleasure in imparting such information and instruction as my long experience and close application to flax-scutching have given me, as well as the result of my many experiments. I am, sir, your very obedient servant, Wm. BAIRD, Mullanboy, Castlefin, Co. Donegal, September, 1862.—*Belfast Morning News.*