

centre of a field without any previous clearing, and to continue the cutting without interruption, while the cut portion of the crop was lying on the ground.

6th. For greater efficiency when operating on a crop partially lodged."

With reference to the influence which Bell's machine had on the subsequent improvements effected in the United States, Mr. Slight, the eminent machinist of the Highland Society's Museum remarks:—

"That at least four specimens of it had been carried to America, and that from the identity in principle between them and those now brought from thence, [to the World's Exhibition of 1851], with other corroborating circumstances, there is little doubt that the so-called American inventions are after all but imitations of this Scottish machine."

It is now but little more than a year since Mr. Bell was the recipient of two distinguished honours. The Highland Society inaugurated a subscription to the inventor of the first efficient reaping machine, which ultimately amounted to one thousand pounds sterling, and the University of St. Andrews evinced its desire to patronise useful learning by granting him the honorary degree of LL.D. Mr. Bell, like many others, both in the English and Scottish Churches, and doubtless in other communions, found that the study and promotion of agriculture and its cognate subjects, was not incompatible with a diligent discharge of the higher and more sacred duties of a parish minister. The parish clergy of Scotland have, as a body, been distinguished in the rural districts for the promotion of education and the industrial arts. Rham, Smith, Berry, and others that might be mentioned, occupy a high standing in the practice and literature of English agriculture, but they have not, on that account, been less distinguished as parish clergymen for their fidelity to the pastoral care. Of Mr. Bell, (who resided, we understand, many years ago in Canada, with the late Hon. Adam Fergusson) the *North British Agriculturist* remarks:—

"Few of those who were present when the testimonial was presented to Patrick Bell, would have imagined that the diffident gentleman before them possessed many of the most amiable features of character. These were best known

to his personal friends. He was a loving and most loveable man, whose tolerant spirit inclined him to the belief that the time was not far distant when there would be less religious strife, and when, charity abounding more and more, the true spirit of Christianity would pervade the minds and actions of all professing Christians to a much greater extent than it has hitherto done. Under the influence of this sentiment, and before the agitation in reference to the Irish Church commenced, he strongly expressed to us the opinion that the connection of Church and State would soon cease to exist. In the discharge of his duties as parish minister of Carmyllie, he displayed the same Catholic spirit; and though not what is termed a popular preacher, he commanded the respect of all with whom he came in contact."

The *London Daily Telegraph*, in a eulogistic article on the great services rendered by the deceased, thus concludes:—

"In an age when science does so much for agriculture, and every day witnesses the perfection of some new device to substitute the swift and unerring action of machinery for the clumsy processes familiar to our ancestors, the death of the first inventor of aids to scientific farming deserves a passing notice. Dr. Patrick Bell, a minister of the Established Church of Scotland, better known as the inventor of the first [efficient] reaping machine ever constructed, died last week at his quiet manse in Forfarshire. In him we have lost the earliest labourer in a very fruitful field. The son of a farmer, and thus practically acquainted with agriculture from childhood, he used his acquired knowledge of natural philosophy, and his taste for mechanics, to aid the agriculturist in securing some share of those advantages which science was then conferring on nearly every other industry. More than forty years ago he constructed a reaping machine so good that it is scarcely even yet superseded; indeed, so thoroughly had he mastered the right principles of construction, so carefully had he provided for every conceivable need, that all the progress made since by American inventors and others has hardly resulted in any change or improvement upon the original design. But Dr. Bell, unwittingly, perhaps, like many other pioneers of useful reforms, did more than discover a reaping machine; he inaugurated a change of system. His discovery was chiefly useful in shewing how much more might be done to aid the work of the field than merely to cut down the nodding harvests. If we can reap by machinery, why not sow? Why not "speed the plough" by the help of that potent vapour which the child Watt saw puffing uselessly from the tea-kettle? So by degrees—first slowly, then in a gush—came a long succession of new mechanical appliances in aid of the farmer. The reaping machine was the parent of a rapidly growing family of steam-ploughs, clod-crushers, rollers, mowing machines, haymakers, and what not, on which the Howards, the Ransomes, the Claytons, have founded their fame and estab-