

is to be hoped that a taste for useful lectures will yet be created among us. We know that it is argued by many that single or disconnected lectures on scientific or mechanical subjects are calculated to impart but little useful information to those who listen to them. We entertain a different opinion, and while admitting that connected series or courses on given subjects are decidedly to be preferred, yet much valuable and interesting information may be imparted in a single lecture; moreover, it frequently happens that young men are induced by what they hear in single lectures to read and examine more fully for themselves, and thus become conversant with important subjects that would otherwise have escaped their attention. There is no lack of gifted lecturers among our educated and professional men, and it only needs assiduous endeavours to educate the public mind to a right appreciation of such means of improvement, to secure for them general encouragement and patronage.

THE MECHANICS OF AGRICULTURE.

We were in the very act of ruminating on the above topic,—busily chewing the cud of some favorite ideas of our own, with a view of incorporating them into an editorial, when there came to hand in the first number of *Hearth and Home*, an article so pat to our purpose, that instead of using the pen, we concluded to resort to the scissors. We hope our readers will do more than read the following remarks. They will well repay prolonged and close reflection.

"The stress of ingenious thinking, applied to the improvement of farmers' tools, within the past twenty years, is quite amazing. The records of the Patent Office seem to indicate that half the inventive brains of the country are enlisted for the farmer, sympathizing with his toil, and studying how he may do his work easier.

When Polk was President, the number of agricultural patents issued per day was, on an average, one. Now, the daily average is seven. The brilliant success of the reaper and mower gave impetus to ingenuity, and every sort of rural labor, on all farms and in all months of the year, has been abridged or modified, or wholly superseded by some cunning device. What is to be the effect of this remarkable development of machinery for farmers?

1. It forces mental activity and ingenuity on the part of the farm operator. A clothor or may whack all day with a dull hoe, but whoever sits on a mowing-machine cannot be sluggish

and do good work with his curious and complicated tool.

2. Machines are educators. Curiosity is piqued to know how the inventor hit upon his idea. The operator must know his machine in every pinion, wheel, crank, and bearing, before it will be wholly his willing and effective slave. The mental activity thus called out will not abate at once. The laborer becomes a thinker, a contriver, he admires ingenuity in others, and believes in the natural dominion that mind has, and should have, over matter.

3. Such machines at once elevate and classify farm labor. The hands on a place are divided into those who can run a machine and those who must be put to the drudgery because they cannot. This is, in effect, a premium on brains, and gives the bright-minded man the advantage over the wooden-headed worker that he ought to have.

4. Machinery on a farm often gives law to muscle and makes a good hand of a bad one. A dullard or an eye-servant may keep his hoe or spade moving, and get over five rows when he ought to have worked out ten. But put him behind a lively-stepping horse, and he becomes as good as any other hand. He knows that if the animal halts in the furrow, somebody will see it. Machines often give out a force and influence of their own. One of the most thrifty farmers in New England says the more good machines he uses on his place, the better work he gets from raw German or Irish hands.

5. There is hope and a splendid future for agriculture from the more skilful and general application of mechanical powers to tillage. Our fathers ploughed with wood, we plough with iron. Our children will turn and till the earth with steam. Scores of able engineers on the Continent, in England, and with us, are studying the steam-plough, and the difficulties connected with it will be mastered as McCormick got over his little troubles; as Watt, and Arkwright, and Stevenson, and Fulton overcame. Since the revival of learning, humanity has been laboring mainly at two giant problems—how to make knowledge general, how to make distances small. Now, we are confronted with another, as fundamental and as pressing as either of the others—whence and how are the busy and multiplying millions to be housed, and fed and clothed?"

SHOULD A FARMER BE MORE THAN A FARMER?
—We think he should. He should be a mechanic as well; should know something more than

To plough and to sow,
To reap and to mow.

He needs ability to repair his tools; to understand how to keep his implements in proper condition, without being entirely dependent on the blacksmith or machinist; to be able to do carpentering work, to patch and mend harnesses, to mend his tinware, and do many other jobs which the denizens of towns and cities find it more convenient to turn over to those who make these repairs a specialty.—*Scientific American*.