

land for planting trees. They do not realize how much value there is in a row of chestnut or other trees along some exposed hilltop where the cold winds blow over the fields and twist off young grain, leaving the roots bare.

Many advantages result from the planting of trees. Not only is the temperature of the wind moderated by passing over and through the belts of timber, but its velocity is changed. For every foot in height a windbreak will protect sixteen feet on the level; or a tree eighty-three feet in height will protect one-quarter of a mile of field.

On sandy plains a forest belt is the only means of keeping a farm protected from sand-laden winds. In a mountainous and hilly country the land is likely to suffer from heavy rains washing out deep gullies in the fields. Few realize the immense amount of water a bed of leaves will retain. It has been proved by the experiment stations of our Government that a bed of oak leaves two inches deep will retain more than two and one-half times as much water as two inches of moss. Then leaves lying upon the ground act not only as a reservoir but also prevent the soil from becoming dry, hard and cracked, as it often does in the open fields.

Pennsylvania at the close of the Civil War ranked second as a lumber producing State. Since then she has allowed the bark hunters to destroy her hemlock forests, and they have left the timber lying upon the ground to feed forest fires. Pennsylvania now imports more lumber than she produces. Her fertile lowlands have been properly changed into farms, but her mountains have been converted into dreary wastes of rock and charred timber. How often do we read of a forest fire, and yet how seldom do we think of the great, the irreparable loss resulting therefrom.

J. H. P., '04.

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### SELF HELP.

Perhaps not more of our students than usual are paying at least a part of their college expenses this year by their own exertions,