

THE Bellefonte Central is through at last and we are now in easy connection with the main lines of R. R. This will prove of almost invaluable importance, especially to those desiring connections to and from the West.

With this we are now in good shape to place our sports in the field—base-ball, foot-ball, etc.,—and command good audiences from our enthusiastic Bellefonte friends. The road opens up a means of quicker, better and cheaper transportation of freight, meaning hundreds of dollars to the College in a single year, in so much that all coal can now be landed at the very furnace door to replace the necessity of hauling with teams from the old yard. To the already rapid growth is added this stimulus for renewed progress. At the approach of Spring and the road, the work at the proposed Mechanics Hall is rapidly advancing.

The station in use at present is merely temporary and of a necessity very crude; but the road authorities hope within a short time to present, in that line, something very neat and appropriate.

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TRAINER G. H. Hoskins has offered four very handsome silver cups which are to be contested for during the present month. The students should show their appreciation of his offer by turning out and doing their best to make good records; and especially do all need the training, if we are to be represented at the inter-collegiate meeting next month. Since the track is now in good condition and we have almost every advantage possible, an effort should be made for a creditable showing.

DR. PUGH'S WORK AT ROTHAMSTED.

The recent visit to this country of a representative of the Rothamsted, England, Experiment Station, and the delivery by him under the provisions of the laws' trust of a course of lectures on some aspects of the work of that station, is calculated to cause a renewed interest in the magnifi-

cent work for agriculture being done there. To those connected with the Pennsylvania State College that work has a special interest through the connection of Dr. Pugh with it in 1857-8. It happens, too, that within the last few years a large amount of work has been done on the question which formed the subject of his researches, and that, as a result, the conclusion which he reached has been very materially modified. The subject in itself, too, is one of both scientific and practical importance, and it has, therefore, seemed to me that it might be of interest to review briefly Dr. Pugh's investigations in the light of the more recent results.

His subject was the relations of the free nitrogen gas of the atmosphere to the nutrition of plants. While the air contains vast stores of this indispensable element for plant growth, its well known indifference and inaptitude for entering into combination would naturally lead to its being regarded as unavailable for vegetation. This view was confirmed by the earliest exact experiments on the subject. The most important of these were made by Boussingault in 1851-55 in the most thorough and exact manner. His conclusions were, however, disputed by Ville, a French investigator, who claimed to have proved that vegetation does feed on the free nitrogen of the air. His experimental methods, however, were far less rigorous than those of Boussingault and Cloez, who was appointed by the French Academy to superintend a repetition of the experiments, found a considerable quantity of ammonia which by accident or design had found its way into the apparatus, a fact which, of course, vitiated the results. In fact it has been, I believe, perfectly well known since that the investigation had absolutely no scientific value.

Among those who became acquainted with this fact was Dr. Pugh. He had made the acquaintance at Heidelberg of a young man who was afterwards employed as Ville's assistant and from whom Dr. Pugh learned many things regarding the experiments which were not generally known. As