The Miners rejoice in the possession of a new sampling machine, recently invented by Professor Richards. It consists of a hollow metal cylinder with seventy-two blades attached to the interior surface, one of which, being closed at the end, causes the sample to flow through an opening in the side of the cylinder into a tank provided. Since the blades are of the turbine pattern, the stream itself operates the machine, and thus this automatic sampler receives the stream of sand and water from the Hendy feeder, takes out $\frac{1}{2}$ part, and allows the remainder to go to the true vanner for treatment. Heretofore, examinations have been made once in five minutes by the crude but only available method of taking a portion from the stream with a dipper once in five minutes. Since with this invention a uniform quantity may be taken for a sample twenty times a minute, the accuracy is therefore more than tenfold increased and the results are correspondingly satisfactory.

The large draughting room on the second floor of Walker has been divided up into two large rooms and two smaller ones. The first large one is twenty-nine and a half by thirty-three feet, and is to be used as a laboratory of acoustics and telephony. It will be furnished with a steady air blast for operating organ pipes, sirens, etc., a separate circuit for driving electric motors, and will be lighted by incandescent lamps. For experimental purposes, telephone lines will be run out to different parts of the building. So far as is known, this is the only laboratory in the country devoted purely to acoustics. The Institute collection of acoustic apparatus, which is one of the finest in existence, will be placed here. The smaller room opening off the acoustics laboratory will be fitted up for magnetic measurements. The other large room, which is about the same size as the first, is situated in the front of the building, and will be arranged for general physical investigation. The excellent light here will be very advantageous for the study of optics, and it is probable that the optical apparatus will be placed here. The other small room will also be of great value, as it will contain all the facilities for electrical construction, such as winding resistance coils, etc. It will contain, besides other apparatus, a standard Wheatstone's Bridge, galvanometer, and a constant temperature tank. This set of four rooms has long been needed; and besides being used for the various purposes just described, they will be of great service in thesis work.

**Holiday Theatricals in the South.**

During the holidays of 189—, the entertainment of the Negro Dramatic Club, of Kittrell, N. C., took place in the district schoolhouse, half a mile from the village. The Club was small, partly because only the “upper crust” was allowed in it, and partly because, by decreasing the number of members, the management increased the size of the audience and therewith the profits. Kittrell contained but fifty or sixty theatre going people.

The performance on this occasion was a long and varied one, and though of a somewhat higher order and price than at first seemed advisable, it drew a large and appreciative audience. It was to be regretted that the new Opera House on Possum Avenue was not completed in time for the holiday celebrations, but the management secured a good substitute in the schoolhouse. The theater was artistically decorated with pine garlands, and illuminated entirely by kerosene lamps, though not entirely illuminated. Since the property man was connected with the Kittrell Hotel, it was not difficult to obtain, through him, the table and bed linen requisite for a curtain. The other stage fittings were furnished by equally reliable firms, while the organ used was manufactured by the Mason-Hamlin Company, or their ancestors.