truss, and is being designed by one of the senior civils as a thesis. Granite abutments will be the supports to the bridge. Under the platform and directly connected to it will be a shaft, and from this the power will be transmitted by means of gears and shafts to a large generator room, situated near the platforms. The room will contain ten alternating current generators to supply the electricity to move the car. The cars will be equipped with the latest type of alternating current railway motors, which have been proved by much recent experiment to be more efficient and economical than the direct current motor. The lighting of the cars will be provided for by a storage system, which is supplied by current from rotary converters, which utilize a part of the alternating current that drives the car.

The road will be located according to the survey of Applecorps engineers, as made within the past year. The roadbed will be constructed according to the latest approved methods, and on either side of the 200 foot right of way will be erected an iron fence. All grade crossings will be guarded by automatic lifting safety gates, thus avoiding otherwise unavoidable grade crossing disasters.

One of the many features of the road will be high speed, which will require a modification of railroad signals. The semaphore signals will be several times larger than the ordinary one, in order that the motormen running at the high speed may see it in time to benefit by it. Another feature will be the continuous service. As fifty cars will be in motion all the time, the trip from Bellefonte to the College can be made every thirty minutes.

The contracts are all to be completed and cars running by September 1, 1904. A small power plant will be erected near the receiving platform to give the system its initial start and supply any losses not accounted for in the design. The platform from which passengers mount the train will be kept in motion by motors receiving their power from the generator room. As the system overcomes all theory contrary to perpetual motion, once started it will continue to run with very low expenditures for