NOTES FROM THE U. S. BUREAU OF MINES.*

STATE LAWS ON USE OF ELECTRICITY IN COAL MINES.

By L. C. Ilsley.

THIRTY of the States in the Union have coal mines, and twenty-eight have regulations or laws governing the operation of coal mines. Pennsylvania was the first to have a coal-mining law of any kind in 1869. By 1890, thirteen States had coal-mining Statutes. Before 1890, electricity was little used in mines, and these early codes contain practically no provisions regulating its use. Since that date the application of electricity in coal mining has made tremendous progress and now twenty-one States make some reference in their coal-mining codes to the use of electricity. The rapidity with which electrical equipment has entered into the many phases of mining has, however, greatly exceeded the advance of regulations governing its use. Even the best electrical mining codes in force need modernizing and some States have even neglected to mention the use of electricity in their mining laws.

In general, the best way to obtain satisfactory electrical equipment for mine service, and to insure its proper installation, inspection, and maintenance, is for each coal-mining State to make and enforce fundamental rules and regulations relating to the use of electricity and electrical equipment in and about coal mines.

Bureau of Mines Technical Paper 271, "Mining Laws on Use of Electricity in Coal Mines," presents the results of a study of the different State codes.

STORAGE BATTERY LOCOMOTIVES.

By L. C. Ilsley and H. B. Brunot.

IN the past ten years the use of storage-battery locomotives in coal mines has rapidly increased. Their use tends to do away with trolley wires except on main haulage roads, hence the danger of electric shock from uncovered trolley wires is lessened

* Communicated by the Director.