

The Barometer and the Coal Mine.

Chicago Record Herald: The number of lives lost in coal mine accidents in this county last year is estimated at about 600. Of these a large proportion were lost in explosions, which occurred on the average about once a month, with death rolls running from half a dozen to more than a hundred. This year there have already been a number of serious disasters, the last one being at Zeigler, Ill., which was due to causes that have not yet been plainly revealed.

In England it is rare that a colliery accident occurs in which there is a large loss of life, though a generation ago just such great disasters as the United States and other countries still suffer were not uncommon. The greatly improved laws providing for mine inspection and ventilation and the development of a class of scientifically trained mining engineers are the causes usually mentioned for the improvement. Another reason assigned, however, is the reliance that mine engineers have come to place on the "colliery warnings" with reference to the atmospheric pressure, which have been received for the last twenty-four years.

The theory of these warnings is that mine explosions are most apt to occur at the time of a sudden fall in the barometer. A fall of an inch in the barometer is equal to a reduction of air pressure to the extent of about half a pound to the square inch. With the lessened pressure the gases from the coal issue into the workings of the mine and the danger of explosions becomes suddenly increased, so that extra attention to ventilation is necessary at such a time. The miners are given warnings whenever the barometer is high and apt to fall suddenly, in order that they may not overlook the danger.

In this country no official colliery warnings are issued, and if there exists statistics to show the relation between atmospheric pressure and mine disasters we are not aware of them. Carelessness in regard to the ventilation of coal mines is criminal at all times, but the offense is a thousand fold increased if the carelessness occurs at a time of special danger.