vention of mine accidents is the mine foreman or manager. . . . He should never cancel any requisition for supplies that are absolutely required. Perhaps the greatest abuse of this sort is the cancellation of supplies which are required to make ventilation more effective." But it is not unusual that the foreman or manager "is handicapped or hindered in his work by the failure to receive proper supplies or equipment from his superiors." That he might "be encouraged to demand the same and . . . be insured against possible loss of employment by reason of his making such a demand . . . the law should back him up in making such demands."" It is an undisputed fact that poor and defective methods of ventilation largely increase the danger of gas explosion: "An adequate air supply is not only required as a safeguard against the accumulation of dangerous gases, but is prerequisite to the maintenance of the health of miners and animals employed underground."2

But the mine manager who is not "insured against possible loss of employment" will take his chances and cancel requisitions for "supplies that are absolutely required." These conditions naturally breed a spirit of carelessness among mine officials, which is, according to expert opinion, "first among the causes of the high fatality rate in American mines." Such was the conclusion reached by three European government experts, among them the Belgian Inspector-General of Mines, who made an examination of American mines upon the invitation of the United States Government. By way of illustration, one of these experts related the following incident:

While passing through a mine in West Virginia with a party carrying both naked and safety lamps, he lifted his lamp toward the roof to test for gas and was surprised to find it present in very dangerous quantities. Turning to the mine superintendent, he remarked, "You should not

C1 B1

C2

**B2** 

A

20

18

17

16

0

09

03

02

C7

A7

**C8** 

**B8** 

A8

09

**B9** 

the scale towards document

21

1

Inch 10

28

35

5

170

1110

1120

1130

146

180

<sup>&</sup>lt;sup>1</sup> J. J. Rutledge: "Mine Accident Prevention." Mines and Minerals, December, 1910.

<sup>&</sup>lt;sup>2</sup> F. L. Hoffman: "Fatal Accidents in Coal Mines." Bulletin of the United States Bureau of Labor, No. 90, p. 471.