the Maritime Mining Record. Mr. Drummond deplored the recent tendency to increase shown by fatalities in Nova Scotian collieries, to reduce which he advocated more stringent enforcement of the existing mining laws. Mr. Drummond's paper was not discussed at length, as it was felt that the strictures it contained were only too deserved so far as the increase in accidents is concerned.

First-Aid Work.

After hearing Mr. Drummond's paper, the meeting removed to the Sydney Casino and witnessed several cinematograph reels lent by the U. S. Bureau of Mines, showing first-aid work, and other matters connected with the "Safety First" movement. The film showing the effects of a coal-dust explosion in the experimental gallery was most convincing, but the other film which showed men wearing oxygen helmets descending a mine slope immediately after an explosion, the slope meanwhile belching great volumes of thick black smoke, was not only unconvincing, but in the opinion of practical men, undesirable, as teaching the public to expect too much of breathing apparatus, and inculcating the belief that men wearing oxygen helmets can go anywhere and do anything. The possibilities of oxygen breathing apparatus in smoke and fumes was well demonstrated by the film showing men wearing apparatus passing into the smoking experimental gallery, but while not wishing to disparage the work of the U. S. Bureau of Mines, who were so kind as to lend these films to the Mining Society without charge, it was the general opinion of the mine managers who saw them that the film above referred to was a little theatrical and misleading.

After the Bureau of Mines films, a number of films were shown illustrating the application of the cinematograph to scientific investigation of motion, these examples being chosen in connection with a paper prepared for the meeting by Mr. Alex. Theurkauf, chief draftsmen of the Dominion Steel Company, on "Cinematrics as an aid to Science."

This finished the proceedings of the first day, and the meeting adjourned at eleven p.m.

Mine Accidents and Their Causes.

On Wednesday morning the reading of papers connected with questions of mine safety were continued. A paper was read, prepared by Mr. John Casey, the manager of Dominion No. 4 colliery, on "Mine Accidents and Their Causes." Mr. Casey referred to the large number of accidents arising from falls of coal, of roof and sides, to the necessity for systematic timbering, and to the widespread propensity of the miner to "take a chance" and to neglect spragging and timbering, oftentimes leading to his death. Mr. Casey, like Mr. Drummond, advocated more stringent enforcement of the existing regulations, but was afraid that no legislation would cure wilful, or unthinking personal negligence.

Safety First.

Mr. C. J. Coll followed with a paper on "Safety First," in which he traced the historical development of the movement, and pleaded for its extension into the mines of Nova Scotia. It has been the proud boast of Nova Scotia that safety has always been a first consideration in its coal mines, and up till now the Province has not felt the need of bringing about the state of auto-suggestion which the phrase "Safety first" is creating among mine workers in the United States to-day. The obsession of individualism characteristic of the last industrial generation in the States, combined with the tremendous influx of an ignorant and docile labor supply from poverty-stricken districts of Europe did give rise to a cynical disregard of human life and ordinary ethics that has rendered necessary some such appeal to the psychology of the individual worker and his master as the slogan "Safety first," but the Nova Scotian is diffident about the matter, because he thinks he always did value human life. Possibly, however, the large number of foreign laborers now in Nova Scotia may render it necessary to take mental stock of our position and see if we also are not in danger of drifting into indifference. The general burden of the papers read before the Nova Scotia Mining Society at this meeting would lead one to believe, however, that the Province is fully awake to its responsibilities in this connection.

The Working of Coal Seams.

Mr. Herd, the assistant mining engineer of the Dominion Coal Company, read a paper on "The working of two coal seams which closely approached each other, by the long-wall method." This paper was of a very practical nature and described an actual case which had come under the writer's notice of the working of two coal seams, by the long-wall method, where the coal seams closely approached each other. The paper was an excellent illustration that hard and fast rules regarding the working of the upper seam first, or the lower seam first, could not be laid down, but were influenced by many local factors. Two other papers were prepared on mining by the long-wall method, but the time would not allow of their being read. One paper was by Mr. J. F. K. Brown, president of the Mining Engineering and Supply Company, of Sydney, who described the possibilities of the long-wall method of mining with the employment of face conveyors and coal-cutters, illustrated with actual statistics from the author's own experience. The other long-wall paper was prepared by Mr. John Johnson, of Sydney Mines, to describe the "Working of the Jubilee Pit of the Nova Scotia Steel & Coal Co. by the Long-wall Method." Mr. Johnson was ill and could not attend, and his paper was taken as read owing to lack of time.

Topographical Surveys.

In the afternoon session of Wednesday, Mr. Boyd, of the Dominion Department of Mines, showed a series of slides illustrating the methods used and the difficulties encountered in making topographical surveys of Canada. It is gratifying to know that such exact methods and the results are insisted upon in this important work, and the audience were particularly impressed with the photographs showing the difficulties of surveying mountainous country. Particular interest was attached to the detailed large scale maps which the Department is preparing for the use of engineers in portions of the Dominion where mining operations are extensive. The use of contours was strikingly illustrated by pictures of Turtle Mountain compared with a cardboard model made on the field from contours and sections taken off the published map. A map of the Dominion was shown marked with the districts already surveyed in less or greater detail by the Survey, and although the work done is but small in comparison with the vast area of the Dominion, it has been carried out in the most important districts, and from the information given by Mr. Boyd has been done with a thoroughness that very few persons properly appreciate.

Transportation.

Mr. C. M. Odell, the resident engineer of the Dominion Coal Company, read a paper entitled "Transporta-