

Dr. A. P. Coleman, H. E. T. Haultain, G. G. S. Lindsey, J. McEvoy, Dr. W. A. Parks, J. B. Tyrrell, T. L. Walker and several others shared the work with the government officials.

The members who visited Canada for the first time were apparently much surprised to find our country so large and our resources so great. Those who have been here before were amazed at the wonderful growth of the past few years. These men will return to their several countries to tell what they have seen and Canada will be better known to the large number of men reached by the reports of our distinguished visitors.

To the Canadian geologists the comments of the visitors on what they saw, the descriptions of similar phenomena in other places and the theories advanced to explain them proved very interesting and useful. Large numbers of specimens were gathered and carried home to laboratories in several parts of the world. The study of these and of the literature and the new interest which the visitors now have in Canadian geology will all help us to interpret the geology of our country. The guide books and maps prepared for the excursions are in themselves a very important contribution to the literature, and will long be useful to those who visit the chief points of interest along the main lines of the railroads and in the mining camps.

### WESTERN FEDERATION STRIKE IN MICHIGAN

The Michigan copper mines are again in operation; but with reduced forces. A few of the mines which were having considerable difficulty in making receipts equal expenditures are still idle, and will probably not be worked for some months. The members of the Western Federation of Miners still refuse to go to work, and the miners at work are all non-union men.

The output of copper is as yet far from normal, but the production shows a gradual though slow increase. The Calumet and Hecla Mining Company has a large number of men at work. The other companies have a comparatively small percentage of their usual working force, and some mines are only able to make a very small daily output.

It is evident that the mines can be operated without the union members and, if the law is enforced, they will be. Since the laws do not compel the operators to recognize the officers of the union as representatives of their employees, the strikers are endeavouring to gain their ends by ignoring the laws. In this they have received considerable encouragement from the actions of the civil authorities.

Every day strikers have endeavoured to prevent miners from going to work. Sometimes they do so by peaceable means, by arguments and by parades made for the purpose of impressing the public with the number of men on strike. To such methods there can be little objection, as everyone recognizes that the strikers should be permitted to use any reasonable means of adding to their numbers.

Frequently, however, and almost daily, the strikers resort to violence and to intimidation by threats. Day after day the workmen have been subjected to insults. Serious conflicts have been time and again averted only by the activity of the soldiers and deputies. Scores of arrests have been made; but, in spite of the fact that the men were taken in the act, nearly all have been freed without punishment. Every such case encourages the strikers to commit further disorders and they are apparently beginning to believe that the laws will not be enforced against them. Recognizing that the local authorities were unable to cope with the situation, Judge O'Brien issued an injunction prohibiting interference with the workmen. A few days later, however, he dissolved it on a technicality and then refused to grant a restraining order to prevent violence and intimidation by threats.

The strikers during the period that the injunction was in force, were comparatively quiet and the workmen were not seriously annoyed. Within a few hours of the dissolution of the injunction, however, the disorder broke out again. The strikers were apparently under the impression that the dissolving of the injunction meant also that the common law was suspended. The workmen were again subjected to forcible interference. Men unconnected with either party were fired on while passing on the public highway. A party of mine guards was met by a fusillade of shots. Finally, last week, one of the deputies was murdered.

Fortunately at this stage the Supreme Court of Michigan ordered Judge O'Brien to show why an injunction should not be issued and in the meantime to put it into force. It is hoped that this action will prevent serious bloodshed.

Throughout the strike there has been practically no discussion of grievances. It is merely a struggle between the owners of the properties and the officers of the Western Federation of Miners. Naturally the owners wish to run their own properties.

The strikers have grievances. They want higher wages, shorter hours, and improved conditions. Some do not want to use the one-man drills.

The average wage paid in Michigan copper mines is comparatively low. A common wage is from \$70 to \$80 per month. There are, of course, many miners making higher wages. Many of those using one-man drills make over \$4, and some over \$5 per day. It is rather peculiar that a demand for higher wages should be made along with one for the abolition of the one-man drill.

Many of the men employed in the copper mines have had very little or no previous experience as miners. Considering their lack of experience it is not surprising that they do not receive high wages. Men of this class are chiefly employed as trammers and earn about \$65 per month. The work is hard; but rests are frequent. Industrious trammers of good physique after a little experience receive much higher wages. Some average \$90 per month.

In a recent statement, President Agassiz says that the pay rolls of the last full month of the Calumet and Hecla show that the miners were receiving an average wage of