

or less, or push them in if we want to be in tune with our neighbors in this little world of ours.

Mr. A. Judge, cornet, has been appointed to lead a division of the band at one of the rinks.

A fund was started some time since called the "Band Fund," which has been quite a success. Music amounting to \$51 has been purchased from this fund in the past eight months, and there is still a handsome sum in the treasury. We congratulate the band on its position and prospects.

## HISTORICAL DIARY.

### NOVEMBER.

- 1st.... Death of the Duke of Abercorn.  
 2nd.... First through C. P. R. train leaves Montreal for the Rocky Mountains.  
 3rd.... Turning of the first sod on the Niagara Central Railway.  
 4th.... Niagara Falls Park Commission put down the line stakes of the proposed new park on the Canadian side.  
 5th.... Meeting of the Balkan conference at Constantinople.  
 6th.... Train robbed in Italy = The Str. *Quebec* raised in 125 ft. of water = The Queen sends a message congratulating Canada on the completion of the Canadian Pacific Railway.  
 7th.... The last spike driven in the C. P. R.  
 8th.... Two unknown men go over Niagara Falls = Eleven of the Frog Lake murderers sentenced to hang = Wreck of the C. P. R. Str. *Algoma* on Lake Superior = Turkey informs the Powers that she will regard the invasion of Bulgaria by Servia as a cause of war.  
 10th.... The French Chamber of Deputies meets = Mr. Stead, of the *Pall Mall Gazette*, sentenced to three months imprisonment for the abduction of Eliza Armstrong.  
 11th.... Eight young men at Ottawa sentenced to life imprisonment.  
 12th.... Wreck of a train on the Baltimore and Ohio Railway, 21 persons injured.  
 13th.... Servia declares war against Bulgaria = Galveston, Texas, visited by a terrible fire, scores of blocks destroyed.  
 14th.... Servians gain a victory.  
 16th.... Riel hanged at Regina.  
 17th.... Black Flags defeated by the French in Annam.  
 18th.... Bulgarians defeat Servians at Slivnitza = British victory in Burmah = Germany accepts the Pope's settlement of the Caroline Islands dispute.  
 19th.... Bulgarians gain another victory near Sofia.  
 20th.... Great earthquake wave on the Pacific coast.  
 21st.... Frightful storm sweeps over the Phillipine Islands = Str. *Iberian* from Boston wrecked on the Irish Coast = Central Prison Commission report to the Government.  
 23rd.... Widin bombarded by the Servians.  
 24th.... Servians driven out of Bulgaria = Imperial elections being held.

25th.... Death of Alfonso, King of Spain = Death of Hendricks, Vice-President of the United States = Scott Act defeated in the United Counties of Russell and Prescott.

27th.... Mr. Gladstone elected in Midlothian = Eight of the Indians sentenced to death for the Frog Lake murders hanged at Battleford.

29th.... An amnesty agreed upon between Bulgaria and Servia.

30th Small-pox subsiding in Montreal.

## LETTERS AND QUESTIONS.

As requested in a former issue, we now give a few ideas concerning

### VOLCANOES.

A volcano is a mountain which throws out melted rock, fire, smoke, and occasionally showers of ashes and stones. It may have its origin on a flat plain or even at the bottom of the sea, but the gradual accumulation of the ejected material all around the opening through which it has been forced, forms a mountain if allowed to remain.

This method of accretion gives the uniform conical outline to volcanoes, without the terraced appearance observed in nearly all other mountains. The opening from which the fire and melted lava are ejected is termed the *crater*. It is more or less circular in shape with one side lower than the other, depending upon the direction of the wind during the eruption.

In many instances the crater is not at the top of the mountain, for a large hollow, often of great depth, technically called the *caldera* occupies the summit, and the crater is at the bottom of this monster cup.

This caldera appears to be formed by the falling in again of melted rock, and sometimes is very large. That of the island of Palma, one of the Canaries, is three miles in diameter and fifteen hundred feet deep. Some idea of the enormous quantity of matter thrown out by an eruption, may be gathered from the statement that in 1783, a prodigious stream of lava flowed from Mt. Hecla and moved slowly down the mountain side, reaching a distance of fifty miles in forty-two days, it then branched into two main streams, one running forty and the other fifty miles further. Its depth varied from six hundred to one thousand feet, and its greatest width was fifteen miles.

But the lava stream does not always run slowly. It is said that in 1805 at the eruption of Mt. Vesuvius, the molten torrent rushed down a space of nearly four miles the first four minutes, but then widened and descended more slowly.

The view of a volcanic eruption must be terrible in its grandeur.

At the eruption of Vesuvius in 1779, the jets of liquid lava mixed with scoriæ and stones were thrown to a height of ten thousand feet, giving the appearance of a column of fire. The lava, however, generally issues from openings in the sides of the mountain, pouring forth in a perfectly liquid state, bright and glowing with the splendor of the sun. At first it flows rapidly, but as its surface becomes cooled and converted into slag, its velocity diminishes. It has to burst the hard coating before it can proceed, and the liberated lava bears on its surface, masses of scoriæ resembling in appearance the slag from an iron furnace. Sometimes the sides of the moving mass