

full particulars of his plan, which will appear in the next number of the *New Dominion Monthly*. Meantime we give his letter accompanying his specification, and reproduce the article which he formerly communicated to the *Montreal Witness*.

CAMBRIDGE, MASS., Jan. 1, 1868.

DEAR SIR,—I beg to send you two copies of a new alphabet,—a musical one,—for local telegraphy or other purposes. I also send an article cut from the *Witness* of April, 1866, to refresh your memory as to the suggestions I then made. Soon after the date just named, I found that a bell would not answer for an alphabet composed of short and long sounds, as its vibration could not readily be stopped at will, like the sound in the string of a piano. I have therefore invented an alphabet for uniform lengths of sound, but which necessitates the use of *four* bells of different notes. This alphabet is also suitable for either four steam-whistles or four air-whistles (fog-whistles); and it will answer equally well for any single diatonic instrument of sufficient power of sound. A military unkeyed bugle, however, is not a diatonic instrument, as it gives the open notes only, which do not include the lower soprano E. You will please to notice, then, that, for telegraphic purposes, bells are the only producers of musical sound which need be confined to the four-note alphabet; and that all the other machines or instruments named in my communication of April, 1866, or in my present one, will answer, in splendid style, for either the four-note or a one-note alphabet.

A light-telegraph of one light, must, of course, use a short-and-long alphabet; a light-telegraph of four lights, of different colors,—say white, red, yellow, green,—to correspond to the four notes, would require a four-color alphabet, to be adapted from the four-note one.

After a while, I shall write you to explain some things in the note at the foot of the printed sheet.

I beg to say, that I sent copies of my

printed scheme to Great Britain and the continent by the steamer of Dec. 16th; and that I began to publish the scheme on this side the water yesterday, the 31st of the same month.

As you did me the honor to publish my article of April, 1866 (which I heard was copied into a London journal), I hope that you will publish a part, or all, of my printed broadside in the *Witness*, all editions; and in the *New Dominion Magazine*, also, if you like.

The whole scheme of this musical alphabet, and how to work it, with examples, is strictly original in every respect. I have also been my own compositor; having set up every type of the job, after work-hours, by permission of my employers.

Yours respectfully,

WM. BOYD.

LOCAL TELEGRAPHING BY SOUND OF CHURCH-BELLS; AND ALSO BY INTERCEPTED LIGHT, OR ELSE BY FLASHES OF LIGHT.

A correspondent informs us, that it occurred to him several years ago, although he has not before now published his views, that church-bells connected with fire-alarm telegraphs could be used for communicating to the local public, by their loud and far-reaching notes, in the same way, but with a slower movement, in which the keys in the electric-telegraph offices are made to speak in revolver clicks. The Morse alphabet to be used; and all who should learn to read this alphabet by sound (and this alphabet would, of course, be taught both to the ear and eye, in the public schools) could tell what the bells were promulgating. An announcement like the following could then, after a while, be made in the evening papers:—"5:30 p.m.—To-night, at nine o'clock, his Worship the Mayor will proclaim on the great bell of the French Cathedral, and at the same time on the principal bells of the suburban churches, some very important news from different parts of the Old World, just now being received by the Atlantic Telegraph from Europe, and by the Overland Telegraph from Asia." Our correspondent also suggests, that, by working the clappers by hand, local bell-telegraphs could at once be established all over Christendom. The steam-whistle, and also Daboll's powerful