

Scientific.

OUR ACOUSTIC BLUNDERS.

Bishop M'Tyeire in the St. Louis Christian Advocate, makes these remarks on church buildings, which may also be applied to Sunday School architecture:

The law of acoustics, as applied to the churches and other buildings may be said to be unknown to this day. Every building is an experiment. We see court-rooms and legislative halls built regardless of expense, with ceilings arched, corniced and frescoed, and one of their main uses is for public speaking, and yet they are the sepulchres of the human voice.

So with the churches—success is an accident. Even he that hath ears to hear cannot hear in some of them through the preacher strains and labors in the message. There is no science—all is empirical. The Gothic will not do for preaching. Our friends lament the fact, who still affect the style. In this state of the case I venture no other suggestions than these. Avoid palpable blunders in buildings, such as low ceilings and high pulpits.

Avoid a wide, dead space between the pews and the preacher; move him up within sympathetic distance of his audience. Take the actual measurement of houses that have been found true to the laws of sound and follow it. The Greek rule is at least simple—putting two cubes together; but a house thus constructed, though easy to speak in, is not the most convenient in other respects. The width equal to three-fifths of the length is better. Never let carpenters or masons plan the house they are to build. Be at some pains and cost for a plan and specifications, even if your church is not to cost over a thousand dollars. Often an awkward opening or defective roof, or an after-thought modification, costs more than an architect's services, to say nothing of taste. Sydney Smith used to say there were three things almost every man thought he could do without practice—manage a small farm, drive a gig, and edit a newspaper. I will add a fourth—nearly every trustee and steward thinks he can plan a church; and dearly have we paid for their apprenticeship.

The windows should be few, narrow and long with the lower and upper sashes moveable, the pulpit platform elevated half an inch for every foot in the length of the house—not more. Avoid recesses behind the pulpit; there is nothing better than a flat wall. Also, avoid uselessly wide aisles and narrow doors or "vomitories."

Chrysome's pulpit stood between the chancel and the nave. Some touches of the Gothic may do for the sake of churchly association and appearance, silently advertising the house of God, and differentiating it from surrounding buildings devoted to common or profane uses; but the Gothic building is an anachronism. Better the wooden pulpit in the street on which Ezra stood "before the men and the women and those that could understand."

"THE EARTH AND MAN."—The Neozoic or Tertiary, ages are of the most interest to man, though geology shows that through all the previous ages, whatever their incalculable duration or their wonderful changes, God never lost sight of man as the chief end toward which all things tended. Toward the close of the Mesozoic age a great and wide subsidence of the cretaceous formation occurred, followed by the elevation of land on a great scale at the beginning of the Neozoic, resulting in a great break in the succession of life. Thenceforth the progress of organic nature lay chiefly in the dropping of many Mesozoic forms and in the introduction of the higher tribes of mammals. The author, speaking of the movements of the latter period, says: "The beginning of these movements consisted of the great and gradual elevation of the northern parts of both the Old and New Continents out of the sea, whereby a much greater land surface was produced, and such changes of depth and direction of currents in the ocean, as must have very much modified the conditions of marine life. The effect of all these changes in the aggregate was to cause a more varied and variable climate, and to convert vast areas, previously tenanted by marine animals, into the abode of animals and plants of the land, and of estuaries, lakes and shallow waters. Still however, very large areas now continental were under the sea. As the Tertiary period advanced, these latter areas were elevated, and in many

cases were folded up into high mountains. This produced further changes of climate and habitat of animals, and finally brought our continents into all the variety of surface which they now present, and which fits them so well for the habitation of the higher animals and of man."—Dr. Dawson.

RELIGION AND HEALTH.—The influence of religion in promoting physical health was never more clearly shown, according to a contemporary, than in the annual reports of Mr. Muller, the founder of the well-known Orphan Home at Bristol, and a Baptist too. A new edition of his "Life of Trust" has just been published in America, and the results disclosed in relation to the health of the orphans, would seem to be as extraordinary as the daily support of the institution by prayer. The orphans, it will be remembered, are generally the children of sickly parents. In the great majority of cases one parent, at least, died of consumption, and, in many cases, both parents were victims to this fatal disease. The children, therefore, by natural law, inherit weak or diseased constitutions, and ought to show an unusual mortality. But the result is quite otherwise, and the healthiest village or country town in the world cannot present a bill of health equal that of the Bristol Orphan Homes. In large cities the annual rate of mortality varies from 2.5 in the healthiest, to four per cent, in the most sickly localities. In the Bristol Orphan Home with ten thousand children of sickly constitutions, the average annual rate for five years has been less than one per cent. As the death-rate among children in large cities, and in the country at large, is nearly twice as great as among adults this fact is a most extraordinary one.—The Baptist.

HOW TO GET SLEEP.—How to get sleep is to many persons a serious matter. Nervous persons, who are troubled with wakefulness and excitability usually have a strong tendency of blood to the brain, with cold extremities.

The pressure of blood on the brain keeps it in a stimulated or wakeful state, and the pulsations in the head are often painful. Let such arise and chafe the body and extremities with a crash towel or rub, smartly, with the hands to promote circulation, and withdraw the excessive amount of blood from the brain, and they will fall asleep in a few minutes. A cold bath or a sponge bath and rubbing, or a good run, or a rapid walk in the open air, or going up and down stairs a few times, just before retiring, will aid in equalizing circulation and promote sleep. These rules are simple, and easy of application in castle or cabin, and may minister to the comfort of thousands who would freely expend money for an anodyne to promote "nature's sweet restorer, balmy sleep."—Health and Home.

HONORS TO OPERATIVES AND FOREMEN.—The Society of Arts and Manufacturers, Vienna, has issued 134 silver medals, with diplomas, to operatives and foremen, recommended for the honor by employers who were exhibitors at the Exposition.

The distribution is as follows:—United States of America 5. Great Britain 10. France 18. Germany 13. Italy 9. Switzerland 5. Belgium 5. Holland 4. Portugal 5. Denmark 4. Sweden 7. Russia 5. Greece 3.

EARLY RISING.—People may talk and write as they please against the habit of early rising but in the bracing atmosphere of this season we know of nothing more invigorating than getting up at four in the morning, and going forth with lantern in hand to meet the rising sun.—Danbury News.

The consumption of coal for the purpose of gas illumination in Great Britain is estimated at fourteen millions of tons per annum, valued at sixty millions of dollars. The total annual production of coal in England is one hundred millions of tons.

As it respects general habits a parent can scarcely teach a child a more valuable art than dispatch without bustle; nor can any one that values his time cultivate a more valuable one for himself.

A Rhode Island paper, describing a picnic, says: "After this a bountiful supply of tongue and other excellent game, including ice cream, was duly disposed of."

THE FERNERY.

Among the inexpensive household adornments requiring little care, and yet affording constant gratification, is the fern case. To the lover of beautiful forms in plant life it is a source of rare enjoyment. The fern case itself is a most appropriate ornament for the parlor, sitting room or conservatory, and from a companionship of two years we are satisfied we should miss the one we have as much as we should miss any household pet—animate or inanimate—our children alone excepted.

Fern cases may be purchased or made. Those for sale at the stores have a bottom of terra-cotta, usually circular in form, with an oval-topped glass covering. Our own we had made to our own fancy. It is of black walnut, eighteen inches long, and stands on legs about two inches high. It is one foot in width, and the bottom part—that containing the earth—is seven inches deep. The glass frame for the top is about sixteen inches high slightly tapering at the top, so that the whole case stands about two feet high. The bottom part is lined with lead, and a half inch hole in the centre allows the superabundant moisture to be left off as necessary. The soil is composed of one part peat or muck, one part sharp sand and one part old, well-decomposed barn-yard manure. Care should be taken that the case is not overstocked. We have had some disappointment of this kind, but have come to the conclusion that a case of the above dimensions will support in health about eight varieties of ferns and lycopers.

The care of a fern case is very simple. It wants the light but not the direct sun. Ours sits on a shelf near a south window, but out of the reach of the direct rays of the sun. About once in six weeks remove the top, give the ferns a slight sprinkling of water and about ten minutes air. They are never troubled with dust and will look bright, moist and of a beautiful green throughout the year.—Maine Farmer.

Some men, like pictures, are better for a corner than a full light.—Seneca.

CALCULIFUGE!

THE reputation which MARGESON'S CALCULIFUGE has steadily enjoyed, and its increasing demand, have firmly established its excellence in the estimation of the public, as a

Sure and Safe Cure for Gravel, Stone in the Bladder, and all Diseases of the Kidneys.

The numerous testimonials received testifying to its efficacy, have again induced the proprietors to bring it to public notice, and they would say to those suffering from any of the above distressing complaints, give it a trial, and save yourself years of misery, besides prolonging your lives.

PURELY VEGETABLE. SOLD BY ALL DRUGGISTS.

WHOLESALE AGENTS. AVERY, BROWN & CO., Halifax.

H. L. SPENCER, 20 Nelson St., St. John, N.B. R. C. MARGESON, Proprietor, Halifax, N. S.

ST. JOHN, N. B., March 26, 1873.

MESSES. R. C. MARGESON & Co.—Gentlemen.—I have been afflicted with gravel and stone upwards of a year and a half. Tried everything I could hear of for its relief without avail. Saw your advertisement of Calculifuge in the Halifax papers; took three bottles according to directions, and in the short space of four weeks am entirely cured. I willingly and my testimony to its value, and heartily recommend it to all afflicted as I have been.

(Signed) DAVID COLLINS, Formerly Harnessmaker, St. John, N.B.

MESSES. R. C. MARGESON & Co.—Dear Sirs.—Please accept this testimony from one who has been suffering for upwards of five years from Gravel and Stone in the Bladder, and was advised by my friends to try your Calculifuge. I did so, and am happy to say that after using the two bottles you sent me last summer, it entirely cured me. I passed five stones the size of small peas, and upwards of a wine-glassful of smaller ones and gravel, and will send them to you by the first chance. I would advise all that are suffering with the same complaint, to secure your valuable medicine at once, as it has been the sole means of curing me. I will take pleasure in giving all the information I can to all that will call to see me at my house. I remain yours, ANDREW CRAWFORD. CHEZZETOOK, March 3, 1873.

MESSES. R. C. MARGESON & Co.—Dear Sirs.—I was a great sufferer for upwards of eighteen years with that most distressing complaint the Gravel. Tried many kinds of medicine as well as different Doctors, but got only temporary relief at short intervals. I saw your medicine advertised called Calculifuge, as well as different certificates from those who suffered with the same complaint. Feeling encouraged, I resolved to try it, and after taking three bottles, I found myself nearly cured, and am of the opinion that the fourth bottle will make a final cure. Wishing you every success, I remain yours, JOHN DUNBRACK, SENR. HALIFAX, July 18, 1873.

HALIFAX, N. S., NOVEMBER 19, 1873.

MESSENGER ALMANACK.

NOVEMBER, 1873.

Full Moon, November 4th, 11h. 34m. morning. Last Quarter, " 11th, 8h. 34m. afternoon. New Moon, " 19th, 11h. 22m. afternoon. First Quarter, " 27th, 3h. 58m. morning.

Table with columns: Day, SUN, MOON, High Tide. Rows for each day of the month.

THE TIDES.—The column of the Moon's Southern gives the time of high water at Parraboro, Cornwallis, Horton, Hantsport, Windsor, Newport, and Truro.

High water at Pictou and Cape Tormentine, 2 hours and 11 minutes later than at Halifax. At Annapolis, St. John, N. B., and Portland Maine, 3 hours and 25 minutes later, and at St. John's, Newfoundland 30 minutes earlier, than at Halifax. At Charlottetown, 2 hours 56 minutes later. At Westport, 2 hours 54 minutes later. At Yarmouth, 2 hours 20 minutes later.

FOR THE LENGTH OF THE DAY.—Add 12 hours to the time of the sun's setting, and from the sum subtract the time of rising.

FOR THE LENGTH OF THE NIGHT.—Subtract the time of the sun's setting from 12 hours, and to the remainder add the time of rising next morning.

NOTICE.

THE Subscriber offers for Sale his well known Farm, Situate in Wilnot, County of Annapolis, on the North back road, about one half mile east from the Wilnot Spa Springs, and about one and a half miles from the Railroad Station. Said farm contains 125 acres of very valuable land, advantageously divided into Hay, Pasture, and Woodland. The hay and tillage land are under a superior state of cultivation, the pasture is of an excellent quality, and wood lot sufficient to supply a family for generations to come. On the Farm is a comfortable House of Size and accommodations to suit a large family. Also 2 good Barns, with other convenient out buildings all in good state of repair. An abundant supply of water is carried into the House by pipes from a never failing Spring, and also taken for the use of the farm.

There are about 100 grafted apple trees producing from 60 to 200 barrels annually.

This property is so well known that further particulars are unnecessary.

The terms of payment will be made easy, only a small proportion will be required down, with good and approved security for the remainder.

The stock and farming utensils can be had by a purchaser of the farm if required. For further particulars apply to the owner on the premises.

GEORGE BALLENTINE. Wilnot, County of Annapolis, January 22nd, 1873.



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July 2.

INTERCOLONIAL RAILWAY.

1873—Summer Arrangements—1873.

COMMENCING ON MONDAY, 26th May, 1873.

NO. 1. (Through Passenger Express) will leave Halifax at 7.30 a. m., and be due in St. John at 8.30 p. m. This train will stop (between Halifax and Truro) only at Windsor Junction and Shubenacadie; and (between Painswick and St. John) only at Booking Stations, except where it may be necessary to cross other trains or to put down passengers who may have got on board at Painswick and stations East and South of that place.

NO. 2. (Through Passenger Express) will leave St. John at 8 a. m., and be due in Halifax at 8.50 p. m. This train will stop (between St. John and Painswick) only at Hampton, Sussex, Petticoat and Moncton; and (between Truro and Halifax) at Shubenacadie and Windsor Junction, except where it may be necessary to cross trains or to put down passengers who may have got on board at stations North and West of Truro.

Nos. 3 and 5. (Pictou Passenger Accommodation) will leave Halifax at 6.15 a. m., and be due at Pictou at 12.15 p. m.

Nos. 4 and 6. (Shediac Passenger Accommodation) will leave St. John at 7 a. m., and be due at point DuChene at 12.15 p. m.

Nos. 7 and 9. (Freight and Passenger Accommodation) will leave Halifax at 11.30 a. m., and be due at Pictou at 8.15 p. m.

Nos. 8 and 10. (Freight and Passenger Accommodation) will leave St. John at 10.50 a. m., and be due at Point DuChene at 7.25 p. m.

No. 11. (Truro Freight) will leave Halifax at 3.30 p. m., and be due at Truro at 9.10 p. m.

No. 12. (Passenger Accommodation) will leave Painswick at 4.20 p. m., and be due at Point DuChene at 5.00 p. m.

No. 13. (Truro Passenger Accommodation) will leave Halifax at 5.15 p. m., and be due at Truro at 8.15 p. m.

No. 14. (Passenger Accommodation) will leave St. John at 2.00 p. m., and be due at Hampton at 3.10 p. m.

No. 15, 17 and 19. (W. & A. R.) will leave Halifax for Windsor Junction at 5.00 and 8.45 a. m., and 3.00 p. m.

No. 16. (Petticoat Freight) will leave St. John at 2.45 p. m., and be due at Petticoat at 8 p. m.

No. 18. (Sussex Passenger Accommodation) will leave St. John at 4.40 p. m., and be due at Sussex at 6.40 p. m.

No. 20. (Truro Passenger Accommodation) will leave Truro at 6.00 a. m., and be due in Halifax at 9.15 a. m.

No. 21. (Sussex Passenger Accommodation) will leave Sussex at 7 a. m., and be due in St. John at 9.00 a. m.

No. 22. (Truro Freight) will leave Truro at 6.45 a. m., and be due in Halifax at 1.20 p. m.

Nos. 23 and 25. (Shediac Passenger Accommodation) will leave Point DuChene at 6.50 a. m., and be due in St. John at 12 noon.

No. 24 and 26. (Freight and Passenger accommodation) will leave Pictou at 6.00 a. m., and be due in Halifax at 2.35 p. m.

No. 27. (Petticoat Freight) will leave Petticoat at 7.00 a. m., and be due in St. John at 1.30 p. m.

Nos. 28 and 30. (Pictou Passenger Accommodation) will leave Pictou at 1.45 p. m., and be due in Halifax at 7.30 p. m.

No. 29. (Passenger Accommodation) will leave Hampton at 3.45 p. m., and be due in St. John at 6.55 p. m.

Nos. 31 and 33. (Shediac Passenger and Freight Accommodation) will leave Pt. DuChene at 10.30 a. m., and be due in St. John at 7.45 p. m.

Nos. 32, 34 and 36. (W. & A. R.) will be due in Halifax at 11.00 a. m., 6.45 p. m. and 8.25 p. m.

No. 35. (Passenger Accommodation) will leave Point DuChene at 3.20 p. m., and be due at Painswick at 4 p. m.

Nos. 37 and 39. (Truro and Moncton Freight Passenger Accommodation) will leave Truro at 9.30 p. m., and be due at Moncton at 8.10 a. m.

Nos. 38 and 40. (Moncton and Truro Freight and Passenger Accommodation) will leave Moncton at 6.45 p. m., and be due at Truro at 5.30 a. m.

LEWIS CARVELL, General Superintendent.

RAILWAY OFFICE, MONCTON, 19th May, 1873. May 21.

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