

Correspondence.

FROM OUR TRAVELLING CORRESPONDENT. THE GREAT WATCH FACTORY OF THE WEST. ELGIN, ILLS., DEC. 1867.

DEAR EDITOR:—A change of climate and location necessitates or produces a great many other changes, as of clothing, diet, health, temper, modes of agriculture, varieties of fruit and shade trees, &c., &c. The Eastern farmer who comes out to the prairies cannot expect that his old varieties of apple and pear trees will produce here as at home; he cannot depend on having his winter-wheat "happened up" snug and warm from the frost by a good warm wrapper of snow, as at home, for the prairie winds sweep it all before them and drift it into every hollow. The change of only a few of the "conditions" of life, compels a change in almost all the methods of living. As an instance of this, it may be supposed that watches made to keep time in the more equable climate of Europe or our Atlantic coast will hardly serve that end with the same accuracy on the prairies, where a fall of 60° in one day is by no means unknown. The need of watches, the expansion of whose works shall more closely compensate each other, in a word which shall more nearly approach in principle the chronometer which runs in the Arctic and the Torrid zone alike, was at once felt though not at once met.

Experience, too, has shown that the manufacture of watches on a large scale can be carried on here with success and profit, that the hand-made watches imported from Europe, and made of pieces purchased from various factories by the watchmaker, cannot compete in accuracy with those made and put together in the manufactory itself, where the greatest care can be exercised to secure a perfect adjustment of all the parts. This last fact has been abundantly demonstrated by the success of the Waltham Factory in Massachusetts.

The enterprising energy in business matters which characterizes this part of the world has been brought into play to supply this want, and in supplying it to make use of all the wisdom which the experience of others has put at the disposal of the public. In the town specified in the date of this letter, and which is some miles from Chicago, a National Watch Factory has been established and is now operating with marked success.

Elgin is a very pretty place, situated on the Fox River, and on two lines of the Chicago and North Western Railway. The site of the town slopes up gently from the bank of the river, which is spanned by a very tasteful iron bridge. The inhabitants are in very large measure New Englanders, and the Congregationalists and Methodists predominate. The only Presbyterian church—Rev. D. C. Cooper, pastor—was formerly a Reformed Presbyterian, but is now an Old School church. The possession of a considerable water-power—a rare thing in Illinois—of itself contributes to the importance of the place; and, to the numerous mills already in existence, a brass foundry will probably soon be added. The watch factory is situated at a point farther down the stream in the middle of a spacious meadow. It is built of granite and of Dundee brick, which approximates somewhat to the former in color. On one side runs the stream of the Fox River, on the other the Railroad, while beyond the latter a gravelly, timber-clad hill rises to the level of the Upper Town of Elgin. Close by, a spacious boarding-house for the use of the employes of the factory is being finished: it is built of the same material as the factory itself.

The factory building is very tasteful in its architecture and somewhat irregular in outline. It covers quite a space of ground, but the erection of additional buildings will soon be rendered necessary by the growth of the business. I entered a business-like room, where I met the Superintendent of the works, and on being introduced by Mr. Cooper as connected with the AMERICAN PRESBYTERIAN of Philadelphia, I was cordially received, and we were shown over the entire building. We first entered the machine-shop in which all the machinery needed to make the different parts of the watch is manufactured. To order this from an ordinary machinist would involve a great and continual outlay, without ensuring satisfaction in quality. The other watch factories could furnish it, but would sooner sink it into the depth of the sea. The wearing away of so many points and edges in the work of cutting, planing and drilling the metal of the watches must of itself give a good deal of employment to this department.

From this we passed to the screw room, where the variously sized screws are made. Each operation of cutting, heading, threading, notching, polishing, &c., requires a separate machine. And the work to be performed requires the greatest care on the part of the operator, as the screws are so fine as only to be clearly distinguished by a magnifying glass of some power. I was shown a small bottle about the size of those used by the homeopaths. It was not full but it contained over 8000 finished screws, and was worth far more than its weight in gold. The iron wire used in this manufactory is imported from England.

To carry your readers as we were carried

through the several departments would only weary them. Among the matters which interested us most, was the manufacture of the dial, which are made of a white, pasty compound of various metals, imported from England. This is placed in a little copper saucer of the size required, and carefully smoothed, and then subjected (a dial at a time) to an intense heat of a curiously built furnace, in which the workman was obliged to keep sight of the calcining, as a second too long would destroy the work. The copper is removed after the dial cools, by chemical dissolution, and the dials are passed to the marker. They are then ruled off with mathematical accuracy, a radius being run through the spot where each number is to be placed. The hole for the insertion of the hour and minute pivot, as also room for the insertion of the second-hand dial, are cut with a lathe, and the entire lettering of the dial is then added. This is done by hand with wonderful exactness even down to the inscription National Watch Factory, which is less than an inch in length and is in characters far finer than the impression of finest type in Johnson's Foundry. The ruled lines are removed, and the lettering is burnt in by a second course of the furnace.

As we passed room after room, lined and doubly lined with rows of machinery, where part after part of the watch was shaped, polished and polished, I was struck with the perfect cleanliness, neatness and order of the establishment. Nothing was at loose ends or out of place: everything needed for the perfection of the work of the physical comfort of the workman was at hand: every person seemed to know just what he or she—the ladies are in the majority—had to do, and to do it with perfect precision. So perfect is the division of labor, that in many instances the filing a notch in the head of a screw or the ratchet-work on a wheel is the sole business of one employe. It was noticeable, too, that while most of the employes were ladies, all the superintendents and care-takers were men, as experience has shown, that however competent woman may become to manage a machine while in good running order, she cannot learn to fix it when out of order.

Following the course taken by the wooden cases, each containing apartments for the materials for ten watches, and each of which receives the contributions of the department as it passes through, we at length reached the topmost room of the building, which is lighted from above, and where these separate pieces attain to that organic unity in which they were complete, with the cardinal addition of Philadelphia made mainsprings. These are the best in the market, being made by an old Frenchman in the Quaker City, and the Company prefer to purchase them rather than to make and use an inferior article from their own establishment. The employes in the rooms below this last are helping to make watches, but know nothing of watch-making: They each do the work set before them and are paid to do it. They know that it contributes to the fulness of some as yet uncompleted harmony; but they know nothing of how that harmony is brought about. But in this last room, a higher knowledge is required, and a skill to adjust part to part, to see the essential unity of purpose under variety of form, and with that purpose in view, to adjust the various parts to each other. Who knows how each of us may contribute our separate note to the diapason of the harmony of God's order by doing just what is set before us? Who knows in what divine methods the Church of the future may be built up, through faithfulness to God (not tradition,) in the sects of the present?

But to return: as the entire watch is here completed, it is subjected, to severe tests of its accuracy, being taught to run in any position whatever, and in any temperature. It is stood upside down, chilled with ice, heated by steam-power, until thoroughly disciplined in its duty, and fitted and made ready for use, in a way that suggests God's dealings with His children in making them to say "I have learned in whatsoever state I am therewith to be content." When at last they are sent forth, all voices in the West unite in confessing their excellence and their thorough adaptation to all climates and circumstances, not excepting the crucial test of Railway travel. The Company manufactures several different kinds of watches, each possessing its own special excellencies, and each made in accordance with the latest discoveries of the art. An application to the Company itself will secure a circular, describing in detail the process of manufacture, and the various excellencies which characterize each.

As I went through the works, I was struck with the necessary results, to the individual workman, of our modern division of labor. Of old times every man did everything for himself, and in our days each man does a single thing only: he files a notch in a screw, and leaves all the rest to his fellows. To the political economists the thing is all correct: production being the chief end of man, any system which enables men to produce more and better workmanship is clear gain. But to the moralist, whose end is man not things, the matter has a different aspect. The varied activities of the ruder stages of civilization exerted a beneficial influence upon the mind; the man who did many things did none of them well, but they made him a many-sided man and developed the powers of his intellect—a greater gain than outward acquisition. The

true weal of a man "consisteth not in the abundance of things that he possesseth, but in what he is. It is good for a man that he should spend all the working days of his life in notching the head of a screw? Is there or is there not a fatal compensation connected with the advance of manufactures? Do we not buy commodities with men?

But there is another side to the question. Education may begin here, to be finished elsewhere. Now, true education always lays hold of and develops some one special faculty, in order to bring the rest up to the same point. And so, perhaps, we are in mercy ordained to be one-sided in this world, in order that when we get to the room in the top of the house, which is lighted from above, the poor imperfection of our work below may contribute to the unity and fulness of some great harmony above. "All members have not the same office."

Elgin has another remarkable mercantile institution—the milk-factory, which is also a condensed-meat and condensed-coffee factory, besides making ice-cream or cheese as the occasion may call for. The milk is purchased from the neighboring farmers and is paid for by the quantity furnished by the cow with the iron scale, of quality as well as quantity is taken into consideration. A glass full is set aside and according to the amount of cream produced by the milk, the whole quantity is paid for. The milk is then warmed, boiled, and transferred to a condenser, which drives off superfluous water and leaves the milk of the density of a thick, sweet cream. Part of this is packed in airtight cans for travellers, but the main part is sent in by rail to Chicago, and sold through the streets to house-keepers, who dilute it to suit their tastes. They know exactly how much milk they are getting, while the cost of transportation is less, as the milk is reduced to a much smaller compass. The factory is very clean and neat, floored with spring-water and washed *ad libitum*. The meat-condensing process is a patent one, which reduces a cow to very small compass. The result given is in thin cakes of the look and feel of glue. When laid on the tongue the first taste is saltish, although no salt is used in its preparation, but in a little the flavor of the meat is perceptible, as the thin cake melts away on the tongue as if it were candy.

So much for Elgin. Next week I start for Minnesota, and hope to tell you something of St. Paul, Minnehaha and Minneapolis.

Yours, &c., ON THE WING.

AMERICA AND HOME MISSIONS.

It is certainly no vapor of enthusiasm, but the plain indication of facts, that promises to this land a pre-eminence in influence for Christ. To this glory she is summoned if she will heed the call; to this high privilege set apart if she prove not disobedient to the heavenly vision. But to attain this, America must herself be made Christian—Christian in reality as well as in name. Her whole heart and character must be converted to Christ and sanctified by his truth. And who are to do this work but Christians? And what Christians but American Christians? This is the great work before the American Church: to impart to the growing national life the form and complexion of the Gospel. The security of republican institutions depends upon this; but that is second in importance to the salvation of the world.

When America, with her vast area, her free and intelligent people, her wealth and her power, shall be truly and humbly devoted to Christ, she will greatly accelerate the redemption of earth. Her influence will radiate in all directions; will reach and permeate all peoples; will search out and warm with its cheering presence the remotest and most uncared-for corner of human wretchedness. This is a national glory worthy of our aspirations. To be foremost in Christianizing the world is a glory that by its brightness veils from view material splendor, commercial superiority, and political chieftaincy. It is an ambition which ennobles those who struggle to attain it; a glory whose realization will endear all nations to us, and render our name sacred to millions.

Moreover, in becoming thoroughly Christian, America will attain the true sequel of its history. Not compelled, like some, to trace its lineage in shadowy incredible traditions, nor in the records of lust and war; this nation was born of parents who were "persecuted for righteousness' sake." On a distant shore, in the darkness of the forest where a cruel spirit had by its own children been worshipped undisturbed, did these parents commit to the care of the God of nations the infant the ocean had rocked and the heavens had comforted. And now behold the benefit of its early baptism! A nation covering a continent, whose cities and villages continuous from ocean to ocean, are in multitude as the forest they have displaced; a nation that in every fibre of its body, in every pulsation of its heart, is consecrated to, and energized by, the life of Christ; a nation to be garnered into the everlasting Kingdom of Christ. Is there a possibility of such a glory for us? Is aught being done to secure a destiny so desirable?

In the midst of the pioneer settlement, remote from comfortable civilization, and surrounded by inclemency and hardship; you observe a man not less earnest than his comrades for a purpose unlike theirs. Educated, adapted to the refinements of life, able, if he should try, to get on in the world, he is separate from earthly weal.

Storms beat and suns glare upon him till his complexion deepens into a forest hue. Severe toil hardens his hands and wears his strength. And what brings this cultured man to this dreary distance? And what reconciles him to such a life? Yonder log hut is the explanation. In that his heart abides. There he lifts up his voice and declares his messages of peace. There he gathers the rude and the weary around him and points to a land free from burning sun and freezing blast, where they neither hunger nor thirst. There, while the national life is just taking root in the soil, he is trying to ingraft into it the character of Christ, that it may fill the land with beauty and with blessing. That is the man who is doing more towards the perpetuity of our nation than many of our political doctors, and has a truer sense of what the country needs than they may dare to claim. That is the man whom God delights to honor, and whom thousands will, in the future nation, rise up and bless—the beloved and heroic Home Missionary. To him, home evangelization is a subject neither less glorious nor less loved than it is to you, my brother in Christ, but it is more intensely, bitterly real. It is a subject that causes him to heave and heave; that entails upon his most sacred affections a harvest of tears. Nevertheless, it is an object for which he strives patiently, manfully. It is an object which sustains him in deep sorrow and cheers him in thick gloom. To attain this he gathers up the wealth of his manhood, the blessings of home and the dearest privileges of life into one sacrificial heap and willingly beholds them consume to ashes on the altar of God. How like the Master he is!

Christian brother, extend to the Home Missionary your most tender and grateful affection. Make him to feel that his devotion to Christ cannot take him from the pursuit of your love. Surround him ever with confidence and with sympathy. Cease not to remember him at the throne of grace; and, withal, withhold not from him one farthing of what you can spare for his support. Encourage him and sustain him; for in his success we attain national integrity, and peace, and honor; in his overthrow we are plunged into corruption, and disgrace, and death.

If God be for us, who can be against us? If God be not with us, whither shall we turn for help from the evils that threaten us?

A. C. S.

CLAYVILLE, N. Y., Jan. 7, 1868.

Editor's Table.

NATHAN THE WISE. BROOKINGHAM, LESSING. Nathan the Wise. A Dramatic Poem by Gotthold Ephraim Lessing. Translated by Ellen B. Frothingham. Preceded by a brief account of the Poet and his works and followed by an Essay on the Poem by Kung Fischer. 16mo. pp. 259. Bevelled boards, gilt top. New York: Leypoldt & Ho.

This is the third in a series of translations of such great foreign poems, as are yet little known to English readers. Previous issues contained King Rene's daughter from the Danish, and Frichof's Saga, the national Epic of Sweden. Volumes soon to follow, will contain selections from the national Epic of Finland, Calderon's Life is a Dream, Tasso's Aminta, &c., &c. This is a literary enterprise which addresses itself especially to the scholarly and cultivated, whose thanks are due to the high-toned and venturesome publishers and their coadjutors, the success of whose work must be comparatively limited, while it places at the reader's disposal a new and constantly enlarging stock of ideas.

Nathan the Wise is, perhaps, the richest in thought and broadest in conception of any of the series already issued or forthcoming. At the same time, it will be found open to the most serious and insuperable objections. It is, in fact, the great literary embodiment of German latitudinarianism; its object being to set forth the religious spirit which is conceived to be at the bottom of all religions, sincerely embraced; which, once possessed, renders it immaterial what form of religion is embraced, and which leads to the tolerating and honoring of all forms alike, or of no form at all, where the essence is supposed to be present. The three religions presented are the Jewish, the Mohammedan and the Christian, and one of the most interesting characters appears to have no particular faith at all.

A work which thus denies the exclusive claims of Christianity must be set down as opposed to evangelical and Scriptural religion; but it has been further more warmly disputed whether Lessing did not design the positive disparagement of Christianity, as compared with the other two forms, and especially the Jewish. Our author was much in company with the noblest specimens of the Jewish race in Germany in his day; his one who shows by far the noblest and most truly religious traits of character, is a Jew; Saladin, the representative of the Mohammedan faith, comes next, while his Christian characters are the poorest specimens on the list. Readers can see what arguments have been used to defend Lessing from this charge, by consulting the able analysis of the play at the close of the volume.

While this most powerful and subtle product of German freethinking must be set down as decidedly anti-Christian, it must not be classed with the godless scullions of a bald unbelief. Lessing's statement of the essence of religious principle—self-renunciation—is so correct, and his illustrations of it so sublimely beautiful as to command the involuntary assent and admiration of the Christian reader. What we have to object to is, that serious and common German fault, of incapacity for recognizing those historical and practical proofs by which the religion of the Bible vindicates its original claims to the great religious ideas of humanity—ideas which Lessing here shows his capacity to appreciate, illustrate

and enforce, but not to credit to their true historical source.

REV. JAMES CAUGHEY.

GLIMPSSES OF LIFE IN SOCI. SAYING, or Selections from the Journal and Writings of Rev. James Caughey. With an Introduction by Daniel Wise, D.D. New York: W. C. Palmer, Jr., Publisher. 8vo. pp. 477.

ARROWS FROM MY QUIVER, pointed with the steel of truth and winged by faith and love. Selected from the private papers of Rev. James Caughey, with an Introduction by Daniel Wise, D.D. pp. 477. Same as above.

Most of our readers are more or less familiar with the name of the author of these volumes as a prominent and successful revivalist in the M. E. Church in this country and in England. We are indebted to the volumes for a fuller revelation of the man and his methods, showing him to be well worth the study of all preachers and all Christians seeking to increase the efficiency of the means in use for the advancement of Christ's Kingdom. The first volume contains a number of his sermons, and extracts from his journals and letters, revealing the workings of his mind, from day to day, while engaged in conflict for the souls of his hearers, and giving a very full portrait of the inner life of a revivalist. The second volume: "Arrows from my Quiver," shows us how he dealt with the external obstacles which impeded the progress of a revival, and how vigorously he grappled with the objections of enemies, opposers and critics. The objects considered are those actually sent to the author in notes, letters and newspaper articles, while engaged in the work.

There is great freshness, vivacity and novelty in the style, and though the matter would bear the most unsparring and wholesale pruning, there is much that is in a high degree valuable and instructive. It would do the staid and sober and argumentative class of preachers much good to come in contact with one bent on the same great ends, but employing means so widely different from their own. Nor must Mr. Caughey's effectiveness be disparaged by classing him with those who appeal only to the excitable among hearers. His writings show no little acquaintance with the best preachers, as Chalmers, and with the best English literature. So, that he is not wanting in "strength of sentiment and weight of matter."

S. T. C. Waggie and Wattie, or Nothing in Vain. By S. T. C. 18mo. pp. 192. Philadelphia: J. P. Skelly & Co.

The instinct of these publishers of Sunday-school books is almost invariably correct. This little volume is one of the choicest of their issues. It illustrates the wide possibilities of usefulness even in the case of a crippled child, the hump-backed "Waggie," and is full of touching and excellent lessons to the young.

MARSHALL. Little Mary's Legacy, or the Gipsy Boy. By Emma Marshall, Author of "Brothers and Sisters." 18mo. pp. 105. Published as above.

A tender, timid child is made the means in this story, of the reclamation of a wild gipsy boy. She passes away—the death of the young Christian, but the boy remains to testify, by a pious and useful life, to the excellence of her influence. A beautiful and effective story.

DUFF'S BOOK KEEPING.

DUFF'S BOOK KEEPING, by Single and Double Entry. Practically illustrating Merchants', Manufacturers', Private Bankers', Rail Road and National Bank Accounts, including all the late improvements in the same. With a copious Index. By P. Duff, formerly Merchant. Founder and Proprietor of Duff's Mercantile College of Pittsburgh, Pa. Twelfth Edition; Enlarged and Revised. New York: Harper & Bros. 8vo. pp. 330.

The high commendations which this book has received from excellent business authority, its twenty editions and its comprehensive scope, entitle it to the favorable regard of commercial students and their instructors, as well as to that of business men generally; it is very handsome and complete.

BOOKS RECEIVED.

MOTLEY. History of the Netherlands: From the Death of William the Silent to the Twelve Years' Truce—1609. By John Lothrop Motley, D.C.L., Corresponding Member of the Institute of France. Author of the Rise of the Dutch Republic, in Four Volumes—Vol. III. With Portraits. 8vo. pp. 598. New York: Harper & Brothers. Philadelphia: J. B. Lippincott & Co.

CHATELAIN. Stories of the Gorilla Country. Narrated for Young People. By Paul Du Chateau. Author of "Discoveries in Equatorial Africa," etc. With numerous Illustrations. 12mo. pp. 292. New York: Harper & Brothers. Philadelphia: J. B. Lippincott & Co.

PAMPHLETS AND PERIODICALS.

FIFTY-FIRST ANNUAL REPORT OF THE New York City Mission and Tract Society. With brief notices of the Operations of other Societies, Church and Sabbath-school Directories and Statistics of Population, &c. 30 Bible House, New York. 8vo. pp. 152.

A document well worthy the study of the philanthropist, the patriot and the Christian. What the combined energies of the pious men and women of all denominations in that great and wicked city are accomplishing to meet the wants of the classes not reached by specific Church efforts, is here described. It is brave and bold work for Christ to come face to face, as the visitors and officers of this Society have done, with the abounding wickedness of the great metropolis and to grapple with it in a kind, yet earnest hand-to-hand conflict. We know not how far the achievements of this Society are to be regarded as representing the total activity of the New York Churches in meeting the vast problem. The report shows that in the employ of the Society itself, there are 46 missionaries, and 393 Tract distributors, that about \$35,000 was contributed during the year to the regular funds of the Society, besides \$27,000 towards building a Mission Chapel, that 682 persons have been led to unite with churches, and 14,483 induced to attend church. The pamphlet has two illustrations, showing a side elevation and ground plan of the new Olivet Chapel, No. 63-Second street. The President of the Society is Rev. Thomas Dewitt, D.D.; Vice-President, A. R. Wetmore; Treasurer, Morris K. Jessup; Superintendent of Missions, Rev. George J. Mingins. The statistics of population, churches, and various evangelizing agencies in New York city, embodied in the Report, are of the highest value and interest.

THE FAMILY TREASURE; an Illustrated Monthly, Rev. W. T. Rindley, Rev. C. E. Babb, Rev. A. Ritchie, Editors. January, 1868. Vol. V. No. 1. Cincinnati: Elm street Printing Company.