

INTELLIGENT PREPARATION.

It is coming to be more and more generally admitted that different pursuits in life require different preparations. When the broad fountain of a solid education are laid, it is a great advantage to build upon them, if possible, with a distinct reference to the future occupation. In trying to steer clear of the stern and rigid rule of olden times, which peremptorily decided a young man's future for him, without reference to his taste or talent, we have perhaps drifted into the opposite extreme of leaving the whole subject entirely to his own predilection. Meanwhile there is frequently a great deal of time wasted in studies which, however good in themselves, or however essential to another person, are not such as will best qualify him for his life-work. The very multiplicity of branches now taught, and the high degree to which they are carried, compel us to make a very limited selection, as the whole of life itself, however long or vigorous, would be utterly inadequate for even a moderate proficiency in them. Thus most of our higher institutions of learning are now offering different courses of study, and even within the various courses many electives are introduced, thus offering every opportunity for a distinctive preparation for life's duties. This, however, is but one step in this important work. Opportunities are like roads, excellent for the well-informed traveller, but, if used without discretion, likely to lead the wayfarer far away from his destination. How is the young and inexperienced person to know which of these many advantages to take, and which to decline, or how are his friends to advise him? Usually it is left to his own preference, which may have been formed by some trifling and irrelevant influence. Perhaps the attachment to or dislike of some particular preacher has produced a prejudice for or against some special study. Because he hated his Latin preceptor he is sure he can never learn languages, or because he was attached to his teacher of chemistry he is resolved to be a devotee of science, while all the time, perhaps, he may have within him good materials for a linguist, and poor ones for a scientist. Then as to his future work, except in rare instances, the youth is utterly at sea. The cases where a special aptitude for some business or profession is so marked as to be unmistakable are very rare. Whim, impulse, and transitory interest are continually mistaken for talent. Even an actual fondness for one kind of work is not always a sure indication of ability to pursue it. Still oftener it happens that even these faint indications are absent, and the youth rises into manhood, with absolutely no preference as to his future occupation, and drifts into something which chance throws in his way, or which promises an easy time and fair remuneration, but which may possibly be the very thing for which he is least fitted. Yet, could we but discern them, there are certain general indications in the child, which, if watched with care, might point out some definite aim, and suggest some definite preparation. For the most part, these are unnoticed, even by parental affection. Unless they are extraordinarily strong, they fade out for lack of development, and thus we have many men and women whose work is below even the average quality, yet who might have become distinguished in some specific manner had a respectful consideration been brought to bear upon their early indications. For example, a boy will perhaps show a strong and clear notion of locality. He quickly learns the lay of the country around him, keeps in mind the points of the compass, measures distances, knows the nearest road to any given place, and always enjoys his lessons in geography. No one thinks much about it, however, or connects it in any way with his future. He is only a boy, and his attention is directed to many other things. He goes through a prescribed course of study, longer or shorter as may be, but without any special emphasis, and, after that is over, he does not seem particularly adapted for anything. Some casual opening offers itself, which he enters, and he never rises above ordinary success. It has never occurred to his parents, himself, or anyone else, that he might have made an excellent surveyor had his thoughts been directed to the work, and his education managed with that in view. So in other occupations there are certain youths who have it in them to become good physicians, good lawyers, good merchants, good farmers, good mechanics, good teachers, or good artists, but who never fill the positions, because their inherent capacities are never discovered. *Emmence* in any pursuit is, of course, very rare, but *excellence* might far oftener be attained were the germs of ability discerned and cultured. The work of the world is spread out in countless directions, and the powers of humanity are able to perform it well and successfully, but the degree to which this will be accomplished must depend largely upon the fitting of each one to his proper share of labour. How is this to be accomplished? Certainly not by the old rule of arbitrary authority, ignoring all personal preferences, and as certainly not by the newer notion that throws all the responsibility of so weighty a decision on shoulders too young and frail to support it. What the young need is the help, suggestion, encouragement, and counsel of those older and wiser than themselves, who are yet interested in their welfare. What parents or older friends need is the wisdom, discernment and foresight, to give such aid intelligently and efficiently. It is not generally more affectionate anxiety that is needed, nor more money, nor more opportunity, but more respectful attention to peculiar

aptitudes, more clear-sighted discrimination between transient fancy and permanent ability, more knowledge of the best methods of development, more wisdom in educational plans and preparations for distinctive labour. There are two important studies which, if pursued diligently by competent persons, might in time reach the rank of professions, and meantime afford most valuable instruction, either in the form of books or lectures. One is the study of child nature, with a distinct reference to the discovery of inherent capacities or tendencies, with a view of directing them into appropriate channels. The other is the study how to treat these capacities when found; how to provide for each an education that shall be broad without being diffusive, that shall recognize the need of proportion and balance, without one losing sight of the particular direction in which the special forces of each youth may be conducted to the greatest usefulness. We hardly know which of these two is the most essential. At present both are in their infancy. It is largely a matter of chance now whether the qualities best fitted for any particular work ever find their way into that work, and thus it is that so much poor, shiftless, inefficient labour is palmed off upon the world. All this would disappear if we could learn how to interpret nature in her most delicate touches and to adapt her manifold gifts, so as to meet the ever-pressing wants of humanity.

FUTURE OF THE WELLAND AND ERIE CANALS.

Whether the facilities of the Welland Canal for passing ocean-built vessels really exist is a matter of doubt. Every boy intrusted with the side of a horse knows that he will "eat his head off" if he is kept too long before closing a bargain. Every reasonably well-informed shipowner knows that good returns are seldom expected unless the vessel has as many tons capacity as there are miles in her voyage. This "rule-of-thumb law" applies to ocean steamers as well, very few of this craft for the Atlantic service now being constructed of less than 2500 tons measurement. On the chain of the great lakes this rule would require vessels of 1200 tons from Chicago to Montreal, and vessels of 1400 tons from Duluth to Montreal, these figures representing the distance of either route in miles. The present Welland passes vessels of only 600 tons, which thus eat their own heads off long before they reach Montreal, to say nothing of crossing the Atlantic. The only alternative left to the Canadian government, therefore, was to enlarge the Welland and St. Lawrence canals, in order to admit vessels of 1500 to 2000 tons capacity. But while the canals are still in process of enlarging, the ship-builders have constantly increased the size of their vessels, so that the lakes above Buffalo contain numerous craft that are both too long and too deep to enter the Welland when it is strained to its utmost. The larger the vessels, the more profitable they become, and consequently the immense hulls that carry the grain to Buffalo and the Erie Canal are in demand more and more, while the extra expense for the breaking of bulk at that port is more than offset by the thorough fanning of the grain and the diminished tendency to "heat."

Just at this point we are led to note a recent discussion in the Canadian Press in regard to the practicability of navigating the ocean and the lakes with the same bottoms. The result of the discussion is that the most experienced seamen declare ocean and lake bottoms to be two distinct things—a decision which the Canadian government has so far shared as to practically abandon, for the present, the attempt to send deeply laden vessels seaward, relying upon the radical reduction in tolls to force a competition with the canals of New York.

Still other railroad routes in Canada are to contest the carrying trade. The building of the Pacific Railway has been undertaken by a syndicate of English capitalists, and when once completed, it will be a formidable rival of the water routes. Indeed, the chief argument advanced for its construction are based upon the taking of the lion's share in transporting the grain of the Northwest—a claim which, if founded on fact, will close the new Welland Canal from the moment the railway is opened. Connecting at its eastern terminus—Lake Nipissing—with the Canadian railways, the Canada Pacific will find eastern outlets without the aid of the St. Lawrence canals; while, if the Coteau Bridge is built, Ottawa will become a railroad centre, whence diverging lines to the southward will send the traffic to American ports in spite of the proximity and terminal facilities offered by Montreal.

The great trunk lines of the United States have also asserted their right to a proportion of the carrying trade. Rolling stock has been marvellously increased, terminal facilities have been established or improved at every Atlantic port where transshipment is necessary, and the great Northwest—American and Canadian alike—the granary of the world, tapped by a Northern Pacific Railway, sends its products to the seaboard. America is the granary of the world, according to the following ratio: United States, 150; France, 105; Russia, 80; Germany, 45; Spain, 42; Italy, 39; Austria (with Hungary), 39; Great Britain, 38.

and Montreal. Between the years 1873 and 1880, New York, with all its railways and its lake and canal navigation, has dropped from sixty per cent. to fifty-one per cent. of the whole amount of grain received at the above-named ports. Within the same period Montreal with better canals but poorer railroads, has varied greatly, but now drops to 7.5 per cent. On the other hand, the three remaining ports, supplied exclusively by rail, have steadily increased, as may be seen by the following table, the data for 1876 not included:

| | 1873 | 1874 | 1875 | 1877 | 1878 | 1879 | 1880 |
|--------------|------|------|------|------|------|------|------|
| New York | 53.4 | 57.8 | 53.7 | 50.7 | 50.7 | 49.1 | 51.1 |
| Boston | 6.2 | 5.5 | 7.4 | 8.2 | 7.4 | 9.9 | 10.9 |
| Philadelphia | 14.5 | 11.9 | 13.8 | 13.2 | 15.4 | 14.2 | 14.3 |
| Baltimore | 9.1 | 11.6 | 11.3 | 15.0 | 16.3 | 29.1 | 17.1 |
| Montreal | 10.9 | 7.1 | 8.2 | 8.2 | 5.2 | 6.7 | 7.5 |

Although New York has not succeeded in holding the proportion of the sum total of grain reaching the sea-board as compared with 1874 and 1877, yet it holds its own with Montreal. And when we consider the sources of supply, we find that during the last season of navigation (1880) the receipts of grain at New York were fifty-six and a half million bushels by rail, sixty-nine and a half million bushels by canal, and four million bushels by river and coastwise—the largest business ever done on the State waterways. The canal men take courage from these figures and predict a very prosperous season for 1881.

With the interests of the whole people guarded against further encroachments by the land routes, and with the early completion of enlarged waterways on both American and Canadian soil, the outlook for a cheaper transportation of breadstuffs bids fair to be bright. The greater the facilities for shipping grain, the better for all lake ports east of Toledo and Detroit; and the less temptation will the prairie farmer have to burn his corn for fuel because its worth to him is ten cents, while in Liverpool the expense of carrying has increased to one hundred and three cents. Competition is the life of trade; and no rail routes, present or prospective, no improved Erie, no enlarged Welland, and no Mississippi route, can hope to secure a monopoly of the carrying trade. In bringing about this result, as we have seen, the great waterways are performing—and will perform—a most important part.—FREDERICK G. MATHER, in *Harper's*.

OUR ILLUSTRATIONS.

The picture of Albrecht Durer, which occupies the place of honour this week, is from a recently-discovered portrait of himself taken in the year 1493. The picture is now in the possession of Herr Eugene Felix in Leipzig, and has attracted a great deal of interest as the only authentic portrait we possess of the great master, in addition to its value as a painting from his own brush.

The beautiful silhouettes of animal life by F. Specht, several of which have been already published in the NEWS, have attracted general attention, and we make no apology for adding to the collection this week.

A ROYAL GARDEN PARTY.—On one of the warmest of summer days in London, their Royal Highnesses the Prince and Princess of Wales gave a garden party at Marlborough House, which was honoured with the presence of Her Majesty the Queen. Her Majesty was accompanied by Her Royal Highness Princess Beatrice, and was attended by the Countess of Eroll, the Hon. Ethel Colclough, Lieutenant-General Lynedoch Gardiner, and Captain A. Bigge. His Majesty the King of the Sandwich Islands, their Royal Highnesses, the Crown Prince and Crown Princess of Germany, with their Royal Highnesses Princesses Victoria, Sophia, and Margaret of Prussia, their Royal Highnesses the Duke and Duchess of Connaught, their Royal Highnesses Prince and Princess Christian of Schleswig-Holstein-Sonderburg-Augustenburg, her Royal Highness Princess Louise (Marchioness of Lorne), his Royal Highness the Duke of Cambridge, her Royal Highness Princess Mary Adelaide (Duchess of Teck) and his Serene Highness the Duke of Teck were present at this entertainment. It affords the subject of a page engraving this week.

The parade of the firemen on the Champ d-Mars last week is represented by a page drawing of our special artist. The men looked well, and their appearance satisfied all present that whatever fault may be found with the management of the Department, the firemen of Montreal are as fine a set of men to-day as ever, and ready to emulate the noble deeds of their predecessors in the Department.

This week we give two engravings of scenes in British Columbia. Mount Baker is the only volcanic mountain known in British North America, and has an interest of itself from this fact. The other engraving is a view taken on the Fraser River, B. C.

MR. A. D. PATTERSON'S PORTRAIT OF PROFESSOR CROFT.—On another page we give an engraving (from a drawing by the artist) of Mr. Patterson's successful portrait of the late Professor of Chemistry of University College. The portrait bears the inscription:

Henry Holmes Croft, D.C.L., F.C.S.,
Professor of Chemistry,
1842—1880.

The Professor, who has now taken up his residence in Texas, was known all over Canada, and his evidence as to the presence of poison, in

murder cases, has on several occasions led to the conviction of the prisoner. His occupation, whilst testing for arsenic, might appropriately be termed "a question of life or death" (for the accused). With his classes he was very popular, and this portrait is a gift from the graduates to the university. Mr. Patterson's work in portraiture since his return to Canada has been such as to win for him, although a young man, a place in the first rank of our portrait painters, and we are glad to be able to present the public with a specimen of his work. Mr. Patterson undoubtedly has a future before him in art, and we hope that his recent success in Toronto may induce him to remain amongst us.

HEARTH AND HOME.

IN our intercourse with others we should endeavour to turn the conversation towards those subjects with which our companions are professionally acquainted; thus we shall agreeably please, as well as innocently flatter, in affording them the opportunity to shine.

You need not fear for the manhood of a good boy. If the little fellow looks into your eyes and speaks the honest truth, if he is respected by those who deserve respect, brave when he should be brave, and yet with no shame of being gentle, thank Heaven, and do all you can to keep him so; but have no fear. As vices strengthen, so do virtues. The good boy is more than likely to be a better man.

A PRETTY woman generally knows she is pretty, and counts upon the effect her beauty produces upon the other sex. Isn't it strange that she never knows when she is the other thing? We can all put up with a good deal of simpering nonsense from a pretty girl, but a homely damsel must deport herself with straight-laced decorum or she makes herself ridiculous. Perhaps it is unfair, but the world will have it so, and it stands an inexorable law.

THE talker who insists upon entering into tiresome details on every subject is generally considered a bore. In that way, some excellent people make themselves disagreeable to others. Many housekeepers have this fault. It is foolish of them to make their work the subject of conversation at all the meals, and at the occasions for social intercourse in the evening hour, for it irritates the husband and children, although all are too respectful to say so. Women would do well to examine themselves in regard to this point, and avoid a persistent habit of telling over how much they have done. On the other hand—for we like fair play—the husband should not forget that his wife is a faithful worker, and to give her an encouraging word now and then. If a man should make an appreciative remark, a wife would be foolish then to tire him with relating the details, while he would be careful not to express himself again. Bear and forbear, and a careful study of one another's necessities for sympathy is needed to make domestic happiness. The wife should not expect too much estimation of her labour from her husband; neither should he leave her to struggle alone with her side of difficulties of household life, especially where there is a family of children. He should ever be ready with advice and help.

HUMOROUS.

HOME is dear to every man's heart. He knows he can go there when all the other places are closed.

A SIGN on an academy, Aberdeen, reads: "Freeman and Huggs; Freeman teaches the boys, and Huggs the girls."

"I SHOULD oppose my mother's marrying again," said the son of a widow; "I'm willing she should have a beau now and then, but I'll not permit a step farther."

A LAWYER says that a convenient way of testing the affections of your intended is to marry another woman. If she don't love you, you will find it out immediately.

THE train had just rolled into the station, and little Charley stood listening a moment to the sound of escaping steam. Then, turning to his father, he said, "Pa, the engine's all out o' breath, ain't it?"

AN old lady residing in Dumfries was known often to employ her wet Sundays in arranging her wardrobe. "Preserve us!" she said on one occasion, "another guide Sunday. I dinna ken when I'll get the drawers red up."

A PROLIFIC SOURCE OF DISEASE.—A trifling indiscretion in diet may lay the foundation of confirmed dyspepsia, and there is no fact in medical science more positively ascertained or more authoritatively asserted than that dyspepsia is the parent of a host of bodily ills, not the least of which is contamination of the blood and the maladies of which that is the direct consequence. Their original cause is, however, thoroughly eradicated from the system by Northrop & Lyman's Vegetable Discovery and Dyspeptic Cure, a medicine which only requires regularity and persistence in its use to cure dyspepsia and the many ills that arise from it. No deleterious mineral ingredient is contained in it, and though its action is thorough in cases of costiveness, it never produces gripping pains in the abdominal region, or weakens the bowels like a violent purgative. It invigorates the system through the medium of the increased digestive and assimilative activity which it promotes, and is also a most efficient remedy for kidney complaints, scrofulous and all diseases of the blood, female weakness, &c., &c. Price, \$1.00. Sample bottle, 10 cents. Ask for Northrop & Lyman's Vegetable Discovery and Dyspeptic Cure. The wrapper bears a fac-simile of their signature. Sold by all medicine dealers.