

LECTURE

DELIVERED BY ELDER WILLIAM WILLES, BEFORE THE UNIVERSAL SCIENTIFIC SOCIETY, SATURDAY EVENING, 27TH OCTOBER, 1855.

[REPORTED BY ROB. L. CAMPBELL.]

I feel it a pleasure to be present on this occasion and to have the opportunity of attempting to minister to your improvement and instruction, and contributing to spend a pleasant evening. I shall speak on the customs and manners of India where I have been laboring. The Prophet Joseph was instructed by revelation to obtain a knowledge of countries, and to seek wisdom and knowledge by study and out of good books.

The Prophets have said Zion should become the joy of all the earth. Her missionaries are being sent to all nations, the improvements in the arts and sciences amongst mankind will thus be brought into our midst, and as oaks grow out of acorns, so these germs will unite and expand until Zion shall become the praise of the whole earth.

There is a remarkable tree in India called the banyan tree, which sends forth roots from its branches which descend to the earth, take root, and form new trunks and stems ad infinitum, until it becomes a perfect tree forest, like America—an off shoot from Britain, becoming much larger than the parent tree—and altho' Zion is apparently an off shoot from the nations, yet she will ultimately become greater than them all.

The natives of India consider according to a well known adage among them that there are three principal duties which man has to perform in society, the raising of children; the planting of trees; and the digging of wells and tanks; the duty connected with raising children is well understood in all parts of the earth and needs no explanation, but in regard to the planting of trees the East Indian plan commends itself to our approval, inasmuch as irrigation, protection, and growth, are secured by the aid of a plan which they follow of surrounding the sapling with a circular mud wall, from a foot at the base to 6 or 7 inches at the top, 3 or 4 feet high, having a slight inclination inwards, and the opening at the top being covered with bramble bushes to render the protection still more perfect. Apertures are left at the bottom of the wall to receive, and convey irrigation streams.

In regard to the tanks, and wells, many individuals appropriate large sums during their life time, and in their bequest for the purpose of excavating wells, and making tanks for the public benefit.

In India they have many processes of rutility, connected with increasing personal comfort by artificially reducing the temperature in their houses. One contrivance is called the kuskus tatty. This is made of a Bamboo frame with cross pieces the whole length of the frame, about the distance of 4 inches apart, on which are placed small vegetable fibres known there as kuskus. This is made the size of the door or window in which it is fixed on the windward side of the house, and during the prevalence of the hot winds, is constantly kept saturated with water, either from the tricklings of water from a perforated trough placed over the top, or water thrown from a mug by an attendant. Agreeing with the experiments illustrated by the celebrated Dr. Franklin, upon the principle that the temperature is reduced by evaporation, which is a source of much comfort to those who have been accustomed to more temperate climes. In this way the temperature of their dwellings is reduced from 20 to 30 degrees.

In addition to this they suspend large punkahs or fans from the ceiling by ropes which are propelled to and fro by native servants by means of ropes and pulleys.

These punkahs consist of oblong frames of wood upon which is stretched cotton cloth, painted and adorned according to the means, and taste of the owners you will readily admit that such an apparatus is of great utility where the sun is almost vertical and the thermometer will stand 120° in the shade, and in the upper provinces of Bengal where the hot winds prevail for several months in the year.

Notwithstanding the heat is so great in the day time large quantities of ice are artificially made, collected and distributed under the superintendence of committees formed for that purpose for the benefit of large societies who contribute of their means to defray the necessary expenses, the process is simple and consists of placing small unglazed earthen dishes on rice straw placed upon the ground which dishes are at sunset nearly filled with water by native men, women and children, employed for the purpose, and between that time and sunrise in each dish a cake of ice is formed, upon the same principle of evaporation, the Northwest wind prevailing during the night tends to effect this.

It is only in the upper provinces in the fall of the year they can make ice. The lower provinces are supplied by ships from America which carry apples, also fruit and flower trees in the ice which preserves them. Butter is kept cool by the ice. It is also used in their wines and other commodities.

Men and animals wear much faster in India than in changeable climates. It requires much care in shielding the head from the sun by means of an umbrella to prevent being sun-struck, which is the case with many who do not use that precaution among both Europeans and natives. Yet on the other hand from mere custom and usage thousands old and young will go with perfect impunity with their heads entirely uncovered and even shaven; their heads shining in the sun-like mirrors having been smeared with cocoa nut oil.

They generally avoid all extremes in eating, drinking, and exercise, which is very observable in the almost entire absence of haste (compared with the Western nations) which characterizes all their movements. They retain with great tenacity their national peculiarities which have been handed down for thousands of years, the stereotyped characteristics of which, are still observable at every turn.

They acknowledge themselves inferior to Europeans in every thing except music, although the state of efficiency of the musical world in India, (if we may be allowed the expression) is at a low ebb at the present time. They have a small violin, with a bunch of jingles at the lower end of the bow; an instrument called by them a sitar, or sort of banjo, with metal strings; a kind of clarinet; horns, and the tumtum, a pigmy drum; they also have gongs, cymbals, and large drums.

An amusing instance of their strong predilection for their own style of music, consisting of very short airs, interlarded with a jumble of indefinable clangor, and illustrative of their non-appreciation of our style of musical compositions took place at the palace of the King of Oude, at Lucknow; where, the king had just introduced to his court a band of European musicians, who were performing at a grand festival given by him, at which they executed a series of musical compositions much appreciated by the European visitors present, which were preceded by the usual tuning of instruments.

After the pieces had all been played the king requested the conductor to favor him with a repetition of the first tune they played. They began their series and went thro' 1, 2, 3, &c., but to their utter astonishment, the king persisted in stating that they had not played the tune which he heard them play at first, and being in despair of satisfying him, they re-commenced tuning their instruments in the usual manner, upon hearing which his majesty expressed his gratification by exclaiming 'that's the right tune,' for this very good reason that it was most like the musical effusions of Indian musicians.

Most of the native musicians are itinerants of the lowest stamp, except a few who are retained in the courts of the Hindoo rulers, called rajahs, or Musselman nababs; but formerly, previous to British rule in India, the poet and the musician were combined in one person, the same as the bards in Europe, and were held in high estimation both by rulers and people. Their entertainments now will sometimes last three weeks and are conducted in a sumptuous style, on which occasions open house is kept.

Dancing by the natives is a professional employment, followed by men and women of disreputable characters, who are hired to dance on these occasions, and in consequence of this it at first excited extreme surprise in the minds of many respectable natives, who had been induced to throw off their prejudices by excepting invitations to balls and parties given by Europeans, to find that the Europeans themselves were the dancers, considering it to be (altho' a necessary calling) a very degrading one.

The Indian naatch or dance consists merely in the exhibition of the most profuse and graceful movements of the head, arms, and body, and many gesticulations with little or no movement of the feet, as well as occasional prostrations and genuflections or kneelings.

These naatch rundeers or dancing girls are sumptuously dressed in flowing garments, and accompany the Musicians with a song, mostly extemporaneous and either of a lewd or amorous character to suit the taste of their employers. As the naatches mostly come off at night the place of entertainment is brilliantly illuminated by lamps supplied with cocoa nut oil, and flambeaux, or neat torch, which renders the whole scene imposing and gorgeous, greatly heightened by the variety of costume worn by the native gentry, and by way of contrast, a large swarm of natives in their undress.

The hookhah or Indian pipe is freely used on these occasions, and consists of a vessel in the shape of a tankard calculated to contain about a quart of water; in the upper opening of which is inserted a wooden pipe, which descends to nearly the bottom of the vessel, and to which is attached pipes, or sometimes long flexible tubes, several yards in length, richly ornamented with silk, grass, gold and silver lace, and furnished with amber or ivory mouth pieces.

At the top of the perpendicular pipe, which is inserted in the water is placed a small pan which fits on closely, and contains the tobacco, and small pieces of live charcoal, to keep the tobacco lighted.

The advantage of this method of smoking tobacco may be readily inferred, as all the smoke which issues through the tube has ascended through the water, consequently parted with some of the injurious ingredients contained in tobacco.

The smoking tobacco of India is manufactured so as to make it agreeable to the devotee of the pipe, inasmuch as molasses, spices, cardamoms, carraways, tamarinds, and rose water, with other scents, are used in its composition.

The tamarind, peepul, and banyan trees, are the most popular, and memeros of the shade trees of India. The tamarind grows as large as the British oak, having a small dark green, narrow leaf, and bears the delicious fruit known by that name. The peepul tree, is an object of veneration among the Hindoos, who suppose that each leaf of this tree contains the spirit of some departed relative of its planter.

In the hot weather it forms a delightful shade, as its leaves are in constant motion, and have a long pendant point.

The banyan or Indian fig, is found covering several acres, and capable of shading a whole

army. The figs furnish food for vast flocks of birds, whose loud and continuous chatter may be heard daily.

I have a few illustrations of trades, modes of conveyance, and public buildings of India which I design to present to you at some future time, which would give you an opportunity of associating my statements with the pictorial representations, for as Cobbett the celebrated grammarian used to say 'let us impress by way of illustration,' by this means ideas are more indelibly fixed upon the mind, by associating representations with names and objects, and names and objects with representations.

I have a representation of a native potter forming pots, and pans, from clay which is placed upon a flat horizontal solid wheel, having a pin in the centre, which turns in a socket, and is made to revolve by placing a piece of stick in a notch, and moved by a sweep of the hand which holds the stick and presses the wheel during the revolutions, of which he alternately turns the wheel and moulds the clay; in fact, if the different works of art produced in India, were placed side by side with the material and implements made use of in their construction, much astonishment would be excited in the minds of an intelligent European artisan, that such results could be produced by such simple means.

This observation will apply aptly to the construction of machinery for building bridges, the manufacture of sugar, or the delicate manipulations employed in the manufacture of Jewelry and muslin for the nobility.

The natives of India make as frequent use of their feet in arts and manufactures as they do of their hands, for instance, in the art of wood turning, a European workman would require an expensively constructed lathe, but the Indian workman by the aid of his feet and a few simple tools and materials will bring about precisely the same results.

I have now brought before you a few preliminary and desultory remarks, hoping at some future time to have the pleasure of delivering a series of lectures, illustrative of my experience in the East Indies; thanking you for your kind attention I pray that the blessings of heaven may attend you for ever in the name of Jesus: Amen.

THE DESERET NEWS.

TRUTH & LIBERTY.



ALBERT CARRINGTON.....EDITOR.

GREAT SALT LAKE CITY:

Wednesday----November 21, 1855.

TO THOSE WHO ARE ENGAGED IN FREIGHT-ING ON THE WESTERN WATERS:

GENTLEMEN:—

You are doubtless aware of the far inland position of Utah, and that all her imported goods have to be transported in wagons from some point in the Missouri river, a distance of over one thousand miles. The tediousness and expense attending this toilsome and unsatisfactory operation cannot be fully realized by those who are only familiar with the facilities afforded by steamboats and railroads, hence, with a view to benefit the present and future population of Utah, to aid in further developing the resources of our wide-spread country and to supplant the labor of animals with the tireless power of steam urged into new and profitable channels, I will give a brief detail of my views upon the subject. I use the term brief from the fact that I am not now in possession of a full fund of information concerning a portion of the proposed route, neither have I present access to those individuals who may be acquainted therewith, I shall therefore discuss the plan as it appears to me, and give such facts as are at hand.

After having tried various routes and methods for the speedy, economical and healthful transmission of our numerous immigration, both foreign and domestic, the northern route from Boston, New York and Philadelphia, to Council Bluffs city, is deemed by far the best, yet, when at the last named point, they are on the Missouri and more than a thousand miles of tedious travel short of their destination, and all our imported articles of machinery and merchandise have usually been landed on the banks of the same river, though at distances still further removed.

All the goods just named are either bought in or shipped to and from St. Louis, thus involving a constantly and rapidly increasing amount of carrying trade, the value of which is fully appreciated but by few, if at all. It is possible that boats already transport our goods to the nearest navigable point, but I do not consider it probable, for this reason I frankly offer my reflections.

For many years steamboats of heavy burden and deep draft have made annual trips for the fur companies far up the Missouri, but on account of their size and the limited nature of the trade on the Upper Missouri, little has hitherto been accomplished. Now alter those conditions by a large addition of freight and the substitution of boats constructed for navigating shallow and tortuous waters, and if even those waters are to be found as favorable as it is presumed they are, and on the route herein discussed, it is obvious that a new field for enterprise is at once opened.

The plan proposed is, for persons engaged in the steamboat business to become acquainted with the kind of boats best adapted for starting from Council Bluffs city and steaming to that point nearest to the South Pass which it is profitably practicable to reach. Whether that point is best to be arrived at by way of the Upper Missouri, Yellow Stone, Big Horn and Wind rivers, or by the Yellow Stone and some other of its tributaries, or whether any of the tributaries of the Yellow Stone will admit boats of the lightest available draft, are questions that I am at present unable to answer, neither can I now determine how near to the Pass such boats can come.

Suffice it to say that, from the best information, the whole route passes through a healthful, generally fertile and beautiful country, and along which, when once opened, the hardy pioneers from the western, northern and eastern States would flock by hundreds and by thousands, causing the opening of cultivated fields and the sudden uprising of villages and towns, as if by the power of magic, in the beautiful Territory of Nebraska. The adventurous spirit of Americans has been often proven, but when steam power leads the van, who can foretell the rapid strides of improvement that will follow in its wake?

But without drawing upon the golden banks of the future, and to show that the present freight trade affords sufficient inducement for moving in the matter at once, I will give the following statistics connected with the transportation of merchandise during the past season:—

Name of firm.	Freight.	Cost in cash.
T. S. Williams & Co.	185 tons at 17c. per lb.	\$62,900
Livingston, Kinkead & Co.	160 "	54,400
Gilbert & Gerrish	75 "	25,500
Snow & Co.	50 "	17,000
Blair & Co.	35 "	11,900
W. S. Godbe	8 "	2,720
Total	513 tons	\$174,420

To haul these 513 tons required for

	Wagons.	Oxen.	Oxen dead.
T. S. W. & Co.	87	1000	300
L., K. & Co.	102	1000	210
G. & G.	54	600	75
S. & Co.	35	234	110
B. & Co.	21	336	20
W. S. G.	5	40	7
Total	304	3210	722

A glance at the above figures will show that the carrying business alone is already of sufficient magnitude to be worthy of your attention, in addition to the large amount annually required by the Trustee in Trust of the Church, which is not shown in the above exhibit, and will explain, in a measure, why I feel anxious to lessen the enormous expenditure for mere transportation.

With an intent to accomplish this object, in case you conclude to respond to the above suggestions, I proffer to send suitable persons, by way of the South Pass, to ascertain by actual, careful examination how near light draft boats can come to that point, and should that distance not much exceed 150 miles, I can readily find a sufficient number of resolute men who will build a fort at the head of navigation, and store and protect all property placed in their charge.

So soon as this arrangement is fully made, it will be a comparatively trifling operation to send teams from Utah for all the goods this market may require, for with a little more care and attention these mountain valleys can be filled with herds of cattle and bands of horses, and numbers of hardy and skilful men are always ready to embark in an enterprise of this nature. And in addition to the increase of freight naturally attendant upon the increase of our population, the reduction of price and the many advantages attending the doing our own hauling, without being compelled to pay out money for the purchase of animals and provisions for teamsters, would directly tend to swell the business to a magnitude well worthy the attention of the most able capitalists.

It may be queried, inasmuch as I am so sanguine of the success and mutual benefit of this new project, why I do not engage in it to the full extent, and build and run the number of boats adequate to the amount of freight. Slight reflection will convince any one that my position is too isolated, and my other operations too numerous and varied, to enable me to successfully compete with you upon your own grounds and in a department with which you are perfectly familiar.

You will please observe that I have not included an inducement held out by our large and rapidly increasing immigration.

Trusting that you will so far deem this article worthy your attention as to favor me, at your earliest convenience with answers containing your views and proposals, and that this new channel for trade will be found feasible and beneficial, and that the fort will be built and the channel sounded by the time that the boats can be got ready,

I remain, very respectfully, your obedient servant,

BRIGHAM YOUNG.

NOTICE.—Persons who are acquainted with the Yellow Stone river and its southern tributaries, or who know of any within this Territory who are, will confer a favor by furnishing such information at the Governor's Office, as it is particularly desirable to have a correct understanding concerning the amount of timber and quality of soil on those streams, and their adaptation to the purposes of navigation with light draft steamers.

WHY DON'T YOU PAY ATTENTION?—From Nov. 33 until now we have called upon you for Hay, Straw, Fodder and Wood, and you act as though you were deaf and blind, for there has only one load of hay been delivered, and that was very poor, and only a few loads of wood. If we had asked you for cash, which is always a lawful tender, we should have expected but a small amount for it is said to be scarce; but to withhold the money, and then require of us cash or store orders for such articles as you have to spare, we need, is not doing as you would like to be done by, and you know it.

Who will mend their ways, and forthwith publish the wanted articles, on their subscription to the 'News,' sufficient in amount and of good quality, just as you yourselves would like to be treated?

Snow, on the morning of the 14th inst. was 2 inches deep in this city, but soon melted off; 10 inches deep at the lower, 14 at the middle and 24 at the upper mills in Big Cottonwood canyon; 8 inches in Ogden city; 6 inches in Cache valley; and from 10 to 18 inches deep in many places between here and Fort Bridger.