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A Disastrous Balloon Ascent.

M. Tissandier, the French aeronaut, accompanied by a party of distinguished scientific gentlemen, recently undertook an ascent over Paris in the balloon L'Univers, in order to make topographical drawings of the fortifications. While at a height of 750 feet the balloon exploded; the great bag at once emptied itself, and the car with its occupants fell with terrible velocity, the former burying itself in the ground. Strange to say, although every individual was more or less wounded, no one was killed.

WHAT WORKING MEN SHOULD EXHIBIT AT THE CENTENNIAL.

A paragraph is going the rounds of the daily press about an elaborate model yacht which somebody is building for exhibition at the Centennial. The hull is to be made of countless pieces of different woods, the rigging of fine silk, the fittings of silver. Every detail of a real vessel is to be repeated in miniature; and to crown all, this remarkable production is to be the work of an individual who never has been aboard the style of craft he proposes to imitate. We mention this instance merely as one of scores, similar thereto, which have lately come to our notice, and which show that hundreds of persons all over the country just at present are at work with the idea of exhibiting like results of their skill at the Exposition. In our estimation, all these people are making an unfortunate mistake, for they are simply wasting valuable time and labor to no good purpose whatever.

If the maker of the yacht above referred to can produce a model, cut roughly from a log if need be, which will possess merit for fine lines or superior design, or which will afford a new idea regarding safety, speed, buoyancy, stability, or any of the qualities sought by marine architects, then he will perform useful work; but we cannot imagine anything more useless than a miniature affair which, because built by a totally unskilled person, cannot be supposed to be a model, and which, too costly even for a child's toy, reduces itself to an evidence of the patience with which the producer has thrown away his otherwise unoccupied time. If any reader of this journal is making minute steam engines to run on a five cent piece, or building miniature furniture or ornaments of immense numbers of fragments, or trying his hand at building working models of large machines on a ridiculously small scale, or indulging in any other like effort, we earnestly counsel him to stop. We grant that model building by learners in trades often serves as excellent practice; but the attempts of tyros are not, it is presumed, ever intended for exhibition, or made with that incentive. To all working men we say: Exhibit. If you have a really nice piece of work which you can command, send it to Philadelphia; but let it be something in your own trade, that is the result of your own individually acquired skill, and not some useless though very pretty affair, tinkering at which has killed a few heavy hours. There will be committees of workmen sent over here from Europe to examine minutely everything, and to report thereon, so that no fear need be entertained but that every article in the great edifice will be critically scrutinized by experts, and judged on its merits.

It is well to remember another fact about these elaborate miniature or piecemeal productions, and that is that the yellow faced, almond-eyed Chinaman, who is now making his way in almost every town in the country, can do that kind of work a thousand times better than you, with all your skill in mechanics, can ever hope to. He can bring over with him from his own country carvings in ivory, or in that hardest of substances, jade, and you can form no idea even of the tools used in cutting the almost invisible lines, much less how the work was accomplished. Your finest productions are incomparably coarse and crude beside these. He can build miniature yachts and steam engines which will excel yours beyond all question, provided you give him something to copy, and then he will reproduce every scratch or accidental stain on the original. Clearly, then, when you attempt the work which is peculiar to the country of the cheapest of cheap labor, you only depreciate your own toil by inviting an unfortunate comparison.

What we want to see in the Centennial are first, new ideas, secondly, evidences of trained and skillful workmanship. Of the former there will be no lack; whether the same will be true of the latter rests with the workmen themselves. We want a display that will tell the world that, besides possessing the ablest inventors, the United States contains the men who can put ideas into shapes that cannot be excelled. Therefore if you have spare time, do not waste it in producing something which does not, but something that does, tell this fact. Do not make fancy inlaid work or build boats, unless such is your trade; if it be, strive to make the best inlaying or the neatest model you ever produced. But if it be without your trade, let it alone; you can no more hope to compete with those whose trade it is to make such things than they with you in your particular branch of industry. If the article you are to exhibit is within your own calling, and is to be the labor of yourself alone, there lavish your work. If the object is of metal, make pattern after pattern until you get a form on which you can imagine no improvement. If you can hit upon a new design—and new designs are sadly needed for a great deal of useful machinery—so much the better. Then try until you obtain perfect castings; and this done, fit the parts to perfection. Do not finish with nickel or silverplate, but go at it with the file. If you know anything about the delicate and beautiful mechanical operation of polishing with that tool, let the world see that you do. It is evidence of superior mechanical skill, and proof that no defects are hidden, as might be the case under a film of plating. If you are laboring on only a part of a machine, and fellow workmen are doing the rest, exhaust all your efforts on your part. It will have the salutary effect of making your comrades do likewise, almost despite themselves, for the finish on the machine must of course be uniform; and besides, your employer will hardly refuse to give you the public credit which would be but a just recompense for your skill and industry.

In a word, stick to your own business, and let that of other people alone. If you are tempted to work on something out of your line, bear in mind that others will take care that the Exposition shall not be wanting in that particular respect, and that your amateur help in supplying a deficiency would

be the last required. Show the world the very best you can do in your particular calling, and this without regard to whether your labors tend to the production of a magnificently finished engine or a neatly forged bolt.

STANLEY, CAMERON, AND NORDENSKJOLD.

The year 1875 will ever be a memorable date in the history of geographical discovery. Within the twelvemonth two of the most important questions of African geography have been settled; and in the far north the demonstration of an open water way between Europe and the countries drained by the great Siberian rivers is perhaps the most important addition to geographical science that could be made in polar regions. Certainly there remains for no future year so many first-rate problems to solve.

The source of the Nile! For twenty centuries it has been the goal of the explorer's ambition. The boldest spirits have essayed its discovery, only to be turned back by insuperable obstacles. Its conquest waited for the plucky energy and resistless push of Stanley.

Starting from Zanzibar in November, 1874, with 300 soldiers and carriers, an important part of whose luggage was the open boat Lady Alice, in sections, Stanley had before him 700 miles of unknown country—part forest and part desert—much of it swarming with hostile savages. By dint of resolute marching and fighting, he accomplished in a hundred days what in the usual course of African travel would have taken as many weeks, though at the cost of half his command; and on February 27, he caught his first glimpse of the great lake with which his name must hereafter be inseparably associated.

Speke and Baker had traced the Nile to the Victoria Nyanza. What was the compass of that great freshwater sea, and whence came its supplies? Thanks to the Lady Alice, which was soon set up and afloat, these questions had not long to wait for resolution. Within the next sixty days, its shores and numerous islands had been mapped, and its tributaries noted. Of the ten considerable streams which feed the Nyanza, the largest and most important proved to be the Shimceyn, in all probability the ultimate source of the Nile. The details of the discoveries thus auspiciously begun we shall not consider here, nor the importance of the region now for the first time opened up to geography. It is enough to note that, through Stanley's daring energy and genius for command, the question which, more than any other, has vexed geographers and challenged explorers for two thousand years has been substantially settled.

In the meantime Cameron has taken up the unfinished work of Livingstone, and—spurred on no doubt by a determination not to be forestalled by his Yankee rival, as he was in the search for Livingstone—he has overcome the obstacles that baffled the veteran explorer, and accomplished perhaps the longest journey ever made by any adventurer in that benighted continent. And its results are as brilliant as the passage was heroic. No other explorer ever crossed the continent so near the equator; and none save Stanley ever achieved so much in so little time. His path lay through the most difficult and dangerous part of Africa, from Tanganyika to the mouth of the Congo; and when the story of the passage is made known, it will, nay, it must, present some of the most stirring chapters of dashing adventure in the history of African exploration.

One thing is certain: The theory of Livingstone has been disproved; and not the Nile, but the Congo, receives the drainage of the great interior basin of the continent. And Africa hides no other secrets to compare with the two which Stanley and Cameron have, within the same few months, manfully wrested from her jealous keeping.

Less significant geographically, but of far greater promise commercially, is Professor Nordenskjold's discovery of an open passage by sea between Europe and Northern Asia. The tract of country thus brought into economical communication with the rest of the world is a vast and largely fertile region, much of it splendidly timbered, traversed by navigable rivers, and only waiting for a suitable outlet for its productions, to become densely peopled. According to Professor Baers the valleys of the Obi-Irtsch and the Yenisei exceed in extent the combined areas watered by the Don, Dnieper, Dniester, Nile, Po, Rhone, Ebro, and all the other rivers flowing into the Black Sea, the Mediterranean, and the Sea of Marmora. The entire region made directly accessible to commerce is estimated by Dr. Petermann to embrace an area one fourth greater than all non-Russian Europe.

The attainment of the pole would give greater renown to the explorer who should succeed in reaching it; but the consequences to humanity would be insignificant compared with those quite certain to flow from this much needed waterway to the heart of Asia.

PHOTOGRAPHING THE INVISIBLE.

Dr. Schnauss, in Photographisches Archiv, essays to enlighten his countrymen with regard to the so-called spirit photographs and that sort of thing, and endeavors to shoulder the blame of such deceptions or delusions upon "that land of humbug, America."

Humbugs do flourish here, we are sorry to admit: humbugs of every grade, from the mysteries of Mumbo Jumbo, devoutly believed in by too many citizens of African descent, to the finer mysteries of Baron Reichenbach's odic force, not less devoutly believed in by many citizens not of African descent. With such a composite population, constantly reinforced by emigrants from every quarter of the globe, it is not surprising that every variety of superstition should from time to time be thrown into, and rise as scum from, the cosmopolitan crucible out of which the average American citizen proceeds. It is not surprising either that keen-witted