WHY MEN CANNOT FLY.

Lack of Progress in Man's Competition with the Birds--Reasons Why No Practical Flying Machine is Likely to be Invented

The New York Sun concludes that this century is likely to be forever memorable for its mechanical and engineering triumphs. It is distinguished from all the centuries which tross." have preceded it as the age of steam and electricity, of rapid transportation for human beings and their products, and for bringing all the world in in- with the birds in flying .- Scientific stant communication, one part with another.

Other eras may have surpassed us in literature and art. Some of our metaphysical science may not be so us; but our mechanical and engineering development has been so far beyond anything of the same sort in the gether, that this century is separated from the eighteenth by the broadest future. Mr. Spreckles is in receipt of gulf in the history of human progress from era to era.

Yet, with all our mechanical triumphs and our engineering achievements, the Sun thinks that we are no further advanced in one respect than men were one hundred years ago, or a him, which will amount, in the course thousand years ago, except to some slight extent for military purposes. Ballooning has made no progress, and is still nothing more than an amusement of no practical value. We do not seem to be any nearer flying than men were at the beginning of the Christian era.

Our modern engineers have not yet constructed a practical flying machine; nay, they have not yet so much as taken the first step in that direction.

The London Engineer, which has lately discussed flying machines in a scientific way, comes to the conclusion that there is no combination of wings or arrangements of any kind which will enable a man to fly with his own strength. He lacks muscular power to practice the accomplishment in which the birds are so proficient. And even if machines are devised to compensate for that lack of power and endurance, they will not be successful unless they shall be so constructed that each pound of the machine will develop as much energy as each pound of a bird. "Not till then," says this engineering critic, can flight for man be achieved.

Because birds fly, that is no reason why man should do the same thing, even if he is able to fit himself wings as well adapted to his body as the wings of the bird are to its physical construction. Already "wings of many model flying machines act just as do those of the rook and other birds" whose movements are slow enough for us to observe just how they fly. For there is a great difference among birds as to the rapidity of their flight, and not only that, but also as to the grace with which they do it. They have various styles of moving through the air, some graceful and others comparatively clumsy, just as the walk of a courtly woman differs from that of a Sioux squaw. "We have no doubt," says our London contemporary, "that if men could once fly, we should soon have as many styles developed as there are men."

We have said that the reason men do not fly is not merely because they lack wings, but also because they are not strong enough. There is no bird of flight which weighs as much as even a very light man, but there are many The limit of weight beyond which the impossible creature."

existence, and one of the heaviest. which can fly well does not exceed thirty pounds, according to the Engineer; and the weight of the albatross to tip, in motion for a whole day. while the strongest man would be exhausted, if he had to keep beating the air with them, in half an hour. And to fly he would need far heavier wings to be kept in motion.

that the albatross possesses as much city of Honolulu, and the application muscular energy as a man, and far of the telephone is made throughout "We have in the bird," it adds, "a with the aid of electric light.

machine burning concentrated fuel in a large grate at a tremendous rate, and developing a very large power in a small space There is no engine in existence, certainly no steam engine and boiler combined, which, weight for weight, gives out anything like the mechanical power exhibited by the alba-

The conclusion arrived at by both of our contemporaries is that man will have to give up the hope of competing American.

Plans of a Sugar King.

It is whispered, says the Washington Republican, that Mr. Spreckles, wonderful in the future as it seems to the San Francisco sugar monopolist, is quietly engineering a scheme for the cession of the Hawaiian islands to the United States, should Congress deterpast, even taking many centuries to- mine to abrogate the reciprocity treaty, which it will probably do in the near a governmental gift of three or four millions of dollars yearly through the operation of this treaty, and if it should continue the gratuity, will increase from year to year. The abrogation of the treaty will impose a heavy tax on of a few years, to \$10,000,000 or \$15,-000,000 annually. He can well afford to pension King Kalakaua and all his uncles, cousins, aunts and other relatives of remote degree in more magnificence than they ever dreamed of to get them out of the way and save such an amount of money.

American influence already dominates in the little insular kingdom, and as the monarch is not in receipt of a colossal income it would not take more than a cord of gold to charm him from his throne. The total revenues of the kingdom only amount to \$600,000 a year, and as the government is patterned after the older nations, Kala. kaua is obliged to do business on a shamefully narrow margin for a real king. To put it briefly and plainly, he is in straitened circumstances for the head of a royal family, and as his native subjects are dying off with leprosy, he will soon have nobody but foreigners to rule. Mr. Spreckles and his associates already own the best of the sugar lands, and they are slowly but surely absorbing what is left. They really own about all that is valuable in the kingdom, and they feel that they ought to have the right to annex their property to any country they want to. The annexation of the Hawaiian islands would, of course, at once settle the vexed question which is now creating such a stir.

Mr. Spreckles' dominions consist of eight islands, having a combined area of about 4,000,000 acres, and a population of 60,000, of whom 44,000 are natives. A hundred years ago the native population was 400,000. Volcanoes, leprosy, sugar, rice and wool are the only productions. Hawaii is the largest island of the group, and isin fact, larger than all the others combined. Maui, Oahu and Kanai are near in size. Mr. Spreckles' kingdom is considerably nearer the United States than any other country, being only 2,100 miles from San Francisco. Japan is 3,500 miles distant from Honolulu. Mr. Spreckles is said to be worth \$25,-000,000 or \$30,000,000. Four years ago he was rated at \$2,500,000.

How the Chinese Make Dwarf Trees.

We have all known from childhood how the Chinese cramp their women's birds which are far stronger than men | feet, and so manage to make them keepers-at-home, but how they grow air cannot be utilized for bird flight is miniature pines and oaks in flower newhere about thirty pounds, pots for half a century has always been ure does not produce heavier birds, much of a secret. They aim first and doubtless for the reason that the last at the seat of vigorous growth, not the proper home for animals endeavoring to weaken it as much as ing more. "The conditions may be consistent with the preservawhich species are developed," tion of life. Take a young plant-say Engineer, "are such that a seedling or cutting of cedar-when ing goes as far as it can go in only two or three inches high, cut off nd speed." The roc of Eastern its tap-root as soon as it has other rootstery it pronounces a "mechanically lets to live upon, and replant it in an earthen pot or pan. The end of the The albatross is the largest bird in tap root is generally made to rest on a stone within it. Alluvial clay is then There are heavier birds with limited put into the pot, much of it in bits the powers of flying, but the maximum size of beans, and just enough in kind weight of any natural flying machine and quantity to furnish a scanty nourishment to the plan'. Water enough is given to keep it in growth but not enough to excite a vigorous seldom, if ever, exceeds twenty-eight habit. So, likewise, in the application pounds, or one-sixth that of a power. of light and heat. As the Chinese ful man. But the albatross can keep pride themselves on the shape of their its wings, thirteen feet long from tip miniature trees, they use strings, wires and pegs and various other mechanical contrivances to promote symmetry of habit or to fashion their pets into odd, fancy tigures.

A century since the Hawaiians were After a mathematical calculation, savages and cannibals. Now there are the Engineer comes to the conclusion over 300 telephone wires in use in the more endurance, with which to propel the islands on the plantations. Some the twenty-eight pounds of its body of the planters cut their cane at night

SCIENTIFIC SCRAPS.

Professor Ayrton, of London, has successfully applied electricity to the propulsion of a trycicle. The added weight was equal to that of anothe.

Mr. E. J. Stone expresses confidence that the British contact observations of the transit of Venus were so successful that they will reduce the possible error in our estimate of the sun's distance to 300,000 miles or less.

One of the glaciers mentioned in the 'Himaylayan Journals' of Mr. Joseph Hooker has a vertical height of 14,000 feet. Its source is the great Kinchinjunga mountain, whose summit reaches an altitude of 28,000 feet above the sea.

A remarkable shooting star was observed one morning from a steamer in the Red sea. It quickly disappeared like ordinary meteors, but left a bright train, some eight or ten degrees long and half a degree wide, which was visible for more than half an hour.

A curious and important discovery is reported by the eminent New York scientist, Brown-Sequard. It has been found that if a powerful stream of car. bonic acid gas is directed against the throat or tonsils for one or two minutes they will become entirely free from sensation for eight to ten minutes, so that a surgical operation can be performed without pain and undisturbed by any sympathetic nervous ac-

From observations of the planet Jupiter from September, 1879, to December, 1881, Herr Kortazzi has concluded that the great rel spot must be either of a liquid or a solid nature. In the former case it may be considered as a large lake in an ocean of other liquid. If it is a solid body it must be a floating mass on the surface of an ocean, asit is only on this hypothesis that we can account for the changes in its position which are observed.

PEARLS OF THOUGHT.

The great question of life is, " What

There are many echoes in the world and but few voices.

Every man desires to live long, but no man would be old.

Woman is the Sunday of man-not his repose only, but his joy, the salt of

We carry all our neighbors' crimes in sight, and throw all our own over our shoulders.

Truth should never strike her topsails in compliment to ignorance or sophistry.

The man who is always boasting of speaking his mind usually has the least

mind to speak. Sorrows are our best educators. A. man may see farther through a tear than a telescope.

Private troubles are very much like infants-the more you nurse them the bigger they grow.

Be loving, and you will never want for love; be humble, and you will never want for guiding.

It is every man's duty to labor in his calling and not to despond for any miscarriages or disappointments that were not in his own power to prevent.

False happiness renders men stern and proud, and that happiness is never communicated. True happiness renders them kind and sensible, and that happiness is always shared.

A Year at Castle Garden.

Last year 520,355 passengers were landed at Castle Garden, New York, Of this number all were aliens but 44,269. This exceeded the total emigration of 1881 by 70,717, and was far larger than in any previous year. Of last year's arrivals 198,468 were Germans, 52,768 were Irish, 44,517 were Swedes, 40,-349 were English, and 27,487 were Italians. The avowed destination of the emigrants were as follows: New York, 166,824; Illinois, 51,331; Pennsylvania, 46,398; Ohio, 23,362; Michigan, 20,-415; Minnesota, 20,193; Iowa, 16,666; Massachusetts, 14,692; New Jersey, 11,849; Missouri, 9,553; Connecticut, 8,153; Indiana, 5,355; California, 4,521; Dakota, 2,883, and Rhode Island 2,410. The remainder were divided among the other States. The larger number-thirty-six per cent,credited to New York is explained by the fact that many emigrants make the city their stopping place for a time and afterward go permanently to the West or elsewhere without making known their destination to the commission.

The cost of receiving and caring for the emigrants per head was in 1880 forty cents, in 1881 thirty-eight and four-fifth cents, in 1882 forty-four cents. In all preceding years since 1847 the cost ranged from \$2 to \$2.50 per head.

LADIES' DEPARTMENT.

Long Marriage Eugagements.

Taking the United States through there is not a large city, says the Philadelphia Press, where marriage engagements are so formally announced and shade of corn blue. looked upon as such solemn obligations as in Philadelphia. Long engagements also prevail to a considerable extent, and they are looked upon as good things, because they familiarize tated in precious stones, are taking as young people with each other and brooches the lead of all others. give them a chance to test their conthey do not agree.

A Quick-Witted Woman

There is one woman in London, says a correspondent, who has her wits about her, and when you come to think about it the fact is highly creditable to London. On the Strand a thief suddenly snatched her purse from her and instantly disappeared in the crowl. In the purse was some small change and a check for £10. The lady spent no time in a fruitless attempt to eatch the thief or find a policeman. She went to the nearest postoffice, took telegraph blank and sent a dispatch to the bank saying: "When any one tions are pedestals for statuary covered presents a check signed by £10, arrest him and detain him till I orated with artistic embroidery. come." She then got into a cab and drove to the bank. When she got dress of a tulle ball dress may be light there she found a policeman explain- weight. Glace silk underskirts are also ing to a very astonished young man permissible under tulle draperies. that he would have to wait a little as they expected a lady visitor. The designs sprays of flowers with their young man will have three years to get fruits, strawberries, blackberries, over his astonishment.

Two Royal Wet Nurses.

their arduous duties. They are magnificent young women, who were selected by the cardinal primate of Spain, or rather received his recommendation for their exemplary conduct. They are clad in ruby-colored velvet, em, broidered with silver, and wear costly white veils. The little infanta cried several times during the christening ceremony. She was christened Maria Teresa Isabel Patrocina Diega. She is a pretty child, with fair hair and blue eyes. After the ceremony the young infanta's ears were pierced by her mother's Austrian medical attendant. This is ancient custom among the Modern Age.

Her First Story.

Miss Louisa Alcott, the well-known novelist, records in a Boston paper that her first story brought her \$5 and travelers who visit Chillicothe are two of her productions. She then relates some pleasant experiences and memo.

One of the most memorable moments of my life is that in which, as I trudged to school on a wintry day, my eyes fell upon a large yellow poster with these delicious words: "Bertha." a new tale by the author of "The Rival Prima Donnas," will appear in the Saturday Evening Gazetle. It was iate; it was bitter celd; people jostled me; I was mortally afraid I should be recognized; but there I stood feasting eyes on the fascinating poster, and saying proudly to nyself, in the words of the great "Vincent Crummies," "This, this is fame!" That day my pupils had an indulgent teacher; for, while they struggled with their pot-hooks, I was writing immortal works, and when they droned out the multiplication table I was counting up the noble fortune my pen was to earn for me in the dim, delightful future. That afternoon my sisters made a pilgrimage to behold this famous placard, and finding it torn by the wind, boldly stole it, and came home to wave it like a triumphal banner in the bosom of the excited family. The tattered paper still exists, folded away with other relics of those early days, so hard and yet so sweet, when the first small victories were won, and the enthusiasm of youth lent romance to life's drudgery.

Fashion Notes.

Scotch ginghams are largely im-

Corn blue is a favorite color for new ress woolens. The new muslins are soft finished,

without any starch or size. Jagged, ragged-edged flounces and

ribbons are coming in vogue. Plush remains in high favor for

household decorative articles. Irregular points called cocks' combs

edge the new Ottoman ribbons. Ashes of roses has made its appear-

nce among the æsthetic colors. The finish and the designs of the new prints are rarely beautiful and ar-

cistic.

Basques and bodices, with very sharp and long points back and front, will be much worn.

Cloth for pelisses is seen among new goods with rough finish in the new

As many as six different colors appear in some of the new Ottoman ribbon cocks' comb corsage bows.

Sprays of flowers, beautifully imi-

geniality and escape in time if they find brocaded, are elegant and fashionable Bodices of velvet, whether plain or for afternoon, dinner and reception toilet.

> Checks, large polka dots, Greek keys. stripes and shamrock leaves are among the designs of the new sateens and cambries New cotton dress goods exhibit

> greater variety in colors and designs than ever, while the finish is simply admirable Sleeves and the collars of dresses

are trimmed with flat-lying collars and cuffs of lace put on over the dress collar and cuffs. The newest fancy in plush decora-

for with this material, either plain or dec

The satin that forms the under-

New brocaded Ottoman silks have for plums, pears, apples and Mandarin ranges

A dinner dress, whether simple and The young infanta of Spain has two inexpensive or excessively costly and wet nurses, who relieve each other in elegant, should never be made in a style that would render it mistakable for a

> Plush-framed pictures and mirrors. plush-covered furniture and plush chair and table mats and banner screens take the lead of all other decorative objects and articles.

> Printed India pongees of light weight appear in the new colors for grounds. with harmonizing tints in the designs. which are in a variety of large and small flower, fruit, Oriental and kaleidozeopic patterns and a variety of polka dot effects.

Panels of brocaded materials or of Spanish Bourbons; even the princes in plain fabrics, richly decorated, are as Spain have their ears pierced, it being fashionable as ever. No style is so onsidered beneficial for sight to have calculated to advantageously display blood drawn very early. That is, in the elegant hand-embroideries, wide fact, their first baptism of blood .- passementeric trimmings or applique bands which frequently border the handsemest of these panels.

A War Incident. Among the Chicago commercial

her second \$10, with a request for more gentlemen, now good friends, whose first meeting was under circumstances just the reverse of friendship. Mr. P. is a Virginian, and Mr. B. is a New Yorker by birth, and both were soldiers during the late war, the former a captain in the famous Confederate troopers commanded by the celebrated General John S. Mosby, and the latter a private in a New York regiment. In one of the many skirmishes in the vicinity of Warrenton, Va., Captair P. was captured by B.'s regiment, the commander of which, in pursuance of a previous order from his superiors "to shoot Mosby's men whenever caught," ordered the immediate execution of the unfortunate captive. He was led out a short distance from the command and a detail of seven men, of whom B. was one, was ordered to execute the drumhead sentence. At the word "Fire!" the squad discharged their weapons straight at the victim, and poor P. fell. riddled with six minnie balls. He was left for dead as food for the vultures. and his executioners mounted their horses and followed their regiment in pursuit of Mosby. The victim was unconscious for twenty-four hours, and when he awoke and feebly called for help there was no response. With six ghastly wounds in his chest, and covered with blood, he dragged himself a mile to a negro's cabin, where he was kindly received and nursed for a week, until Mosby's forces had rallied and driven the Federals from the vicinity. Then for the first time his wounds were dressed by a surgeon, ant in about six months he rejoined his command and fought until the final surrender at Appomattox. His health has ever since been delicate but he is energetic and pushing, and is a very popular and successful salesman, and has no warmer friend than B., who was one of his executioners, or thought he was .- Chillicothe (Ohio) Constitution.

> Experienced lumbermen say that the supply of walnut is rapidly diminishing, and that fully three-fourths of the good stock throughout the country has been consumed within the last ten years

CLIPPINUS . . -... CURIOUS. In the polar regions snow sometimes

falls from a cloudless sky.

On an average nowadays thirteen theatres are burned every year.

Women childless in Europe after years of marriage often have families in Australia.

The eastern side of the Atlantic is warmer at the same latitude than the western side. That monarch of the seas, the Great

Eastern, is lying idle at Milford Haven, England, not only eating its head off, but consuming itself generally. There are 246 cities of over 10,000 in-

habitants each in this country, and nearly one-quarter of the population of the United States are dwellers therein. Mrs. Mehnert, ninety-nine years old,

has kept the Golden Trumpet hotel, at Reichenbach, Germany, for eighty consecutive years. She is still hale and

After a recent violent storm on the English coast a quantity of saline matter was observed on windows at a distant inland. The deposit is believed to have been made by ocean spray, which in this case must have been blown by the wind at least sixty miles.

The garlands worn by the Egyptian mummies were made of the petals and sepals of different flowers, inclosed each in a leaf of the Egyptian willow and then arranged in rows. Larkspur, blue lotus, white lotus, saffron blossom and acacia were among the flowers thus prepared.

In the early centuries of the Christian era the cathedral of St. David's, Wales, was a place to which pilgrimages were made by kings and conquerors. After the canonization of the saint two visits to his tomb were con. sidered equal to one to Rome, and three equal to one to Jerusalem.

It is related by Dr. Foote's Health Monthly that a Hindoo will not tell a lie under the sacred peepul tree and accordingly, that at Ulwar the Hindoo shopkeepers refuse to take lodgings on a street where the English government propose to plant rows of the peepul trees for shade, [asking: "How can we do business under those trees?"

San Francisco the past winter has had its first sleighing in thirty years, as the result of the only heavy snowstorm in that period. Thousands of young folks saw snow for the first time in their lives. Sleighs were hurridly constructed, both for coasting and driving. One of the city's millionaires was seen in a piano box, under which were runners made of planks with the ends rounded off.

THE FAMILY DOCTOR.

Pains in the side are most promptly relieved by the application of mustard.

To cure sneezing, plug the nostrils with cotton wool. The effect is instantaneous.

Broken limbs should be placed in a natural position and the patient kept quiet until help arrives.

To destroy black-heads, wash the face thoroughly at night with tepid water and rub briskly with a Turkish towel; then apply a mixture of one ounce of liquor of potassa and two ounces of cologne.

To treat sprains give the affected part rest and apply warm fermentations. If inflammation has set in put on leeches and cooling applications, which may be removed at intervals if necessary. When the inflammation subsides use friction and stimulating liniments or poultices made of bread vinegar arel water.

One of the simplest and best reme dies to be given to children troubled with worms is poplar bark. Physicians use it with marked success. Itcan be bought at any drug store. Take a little pinch of the bark-as much as you can hold on the point of a penknife-and give it before breakfast. It has a clean, good taste, and any child will take it.

The Star of Bethlehem.

A writer in the Boston Herald claims that the star of Bethlehem will re-appear in 1887. The general belief is that this star is the one which blazed out in the constellation of Cassiopeia in the time of Tycho Brahe in 1572. This remarkable star reached the brilliancy of Jupiter, and then slowly faded to invisibility. Its reappearance is merely conjectured. The character of the forces at work to produce this remarkable display are a mystery. The spectroscope, had it been invented at the time, might have thrown some light on the matter. It is impossible to estimate the forces required to make such a light at the distance of the fixed stars .- Rochester Democrat.

The mother of President Garfield spends several hours every day reading the published works of her son,