
THE WORD

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FLYING.

MODERN science has at last admitted Flying into its family of respectable sciences, under the name pneumatics, aerostatics, aeronautics or aviation. The mechanics of Flying may be studied and practiced by any qualified man without loss of his scientific standing.

For centuries there have been able and worthy men, together with pretenders and fanciful adventurers among the claimants to a knowledge of the science of flying. Until the present time orthodox science has fought and held the field against all claimants. It has been a long and hard fight. The man of merit has been subjected to the same condemnation or ridicule as a charlatan and fanatic. The aviator who now flies leisurely through the air or rises and falls, whirls or darts or glides in graceful figures before admiring spectators, is able to do so because of a long line of men, reaching from the past centuries into the present, who made his success possible for him. They endured much ridicule and censure freely given; he earns a substantial reward and receives the praises of admiring throngs.

The science of flying was not welcomed nor easily admitted into the circle of recognized sciences and by their votaries granted its title of scientific respectability. The men of the approved sciences admitted the science of flying to their number because they had to. Flying was proven and demonstrated to the senses as facts, and could no longer be denied. So it was accepted.

Every theory should be submitted to tests and proven before it is accepted as true. That which is true and for the best will persist and overcome all opposition in time. But the opposition which is shown to many things outside what are at the time the limits of restricted science, has prevented minds trained to scientific thought from taking up suggestions and bringing to perfection certain thoughts which would have been of great use to man.

The attitude of authorized science to frown on subjects outside and not accepted is a check to the increase and power of frauds and fanatics, who grow like weeds in the hotbed of civilization. Were it not for this attitude of science, the frauds, fanatics and priestly pests would, like

noxious weeds, grow and overshadow, crowd out or strangle the human minds, would change the garden of civilization into a jungle of doubts and fears and would compel the mind to return to the superstitious uncertainties out of which mankind was led by science.

Considering the ignorance which in varying degrees prevails among all minds, it may be, perhaps, best that scientific authority should unscientifically scowl at and deny subjects or things outside its restricted limits. On the other hand, this unscientific attitude hinders the growth of modern science, postpones valuable discoveries about to be made in new fields, burdens the mind with unscientific prejudices and so holds back the mind from finding its way through thought to freedom.

Not long ago the journals echoing the opinions of science ridiculed or condemned those who would build flying machines. They accused the would-be flyers of being idle or useless dreamers. They held the efforts of would-be flyers had never amounted to anything, and that the energy and time and money wasted in such useless attempts should be turned into other channels to get practical results. They repeated the arguments of the authorities to prove the impossibility of mechanical flight by man.

Flight or flying is now a science. It is being employed by governments. It is the latest luxury indulged in by daring sportsmen. It is a subject of commercial and public interest. Results of its development are carefully noted and its future eagerly anticipated.

Today all journals have something to say in praise of the "man-birds," the "bird-men," the "aviators," and their machines. In fact, news about pneumatics, aerostatics, aeronautics, aviation, flying is the greatest and latest attraction which the journals offered to an attentive world.

These moulders of public opinion are forced by facts and public opinion to change their views. They wish to give the public what the public mind desires. It is well to forget the details and the changes of opinions in the flow of time. However, what man should try to become alive to and what he should remember is that prejudices and ignorance cannot forever check the growth and development of the mind nor stop its power of expression. Man can feel strong in the thought that his powers and possibilities will be best expressed if he works diligently in thought and action for what he conceives possible and best. The opposition offered by prejudices and public opinion can, for a time only, obstruct his progress. Prejudices and mere opinions will be overcome and swept away as the possibilities become evident. In the meantime, all opposition offers the opportunity to develop strength and is necessary to growth.

In moments of reverie, of deep thought, of ecstasy, man, the mind, knows that he can fly. At the time of elation, at the hearing of good news, when the breath flows rhythmically and the pulse is high, he feels as though he could rise upward and soar onward into the spaces of the beckoning unknown blue. Then he looks at his heavy body and stays on earth.

The worm crawls, the pig walks, the fish swims and the bird flies. Each soon after it is born. But long after birth the man-animal cannot fly, nor swim, nor walk nor crawl. The most he can do is to squirm and kick and howl. Many months after birth he learns to crawl; then with much effort he creeps on hands and knees. Later on and after many bumps and

falls he is able to stand. Finally, by parental example and with much guidance, he walks. Years may pass before he learns to swim, and some never learn.

Now that man has achieved the miracle of mechanical flight, it would seem that when he masters aerial flight by mechanical means, he will have reached the limit of his possibilities in the art of flying. This is not so. He must and will do more. Without any mechanical contrivance, unaided and alone, in his free physical body, man shall fly through the air at will. He will be able to rise as high as his breathing capacity will permit, and to guide and regulate his flight as easily as a bird. How soon this shall be done will depend on the thought and effort of man. It may be that it will be done by many of those now living. In future ages all men will be able to acquire the art of flying.

Unlike animals, man learns the use of his body and senses by being taught. Mankind must have object lessons or an example, before they will accept and try that which is possible for them. For swimming and flying, men have had the fishes and birds as object lessons. Instead of trying to find out the force or energy used by birds in their flight, and of learning the art of employing it, men have always tried to invent some mechanical contrivance and to use that for flight. Men have found the mechanical means of flight, because they have thought and worked for it.

When man watched birds in their flights, he thought about them and wanted to fly, but he has lacked confidence. Now he has confidence because he flies. Although he has patterned after the mechanism of the bird, he does not fly like the bird, nor does he use the force which a bird uses in its flight.

Sensible of the weight of their bodies and not knowing the nature of thought nor its relation to their senses, men will be astonished at the thought of their flight through the air in their physical bodies only. Then they will doubt it. It is likely that they will add ridicule to doubt, and show by argument and experience that unaided human flight is impossible. But some day one man bolder and more qualified than the rest will fly, without other physical means than his body. Then other men will see and believe; and, seeing and believing, their senses will be adjusted to their thought and they, too, will fly. Then men can no longer doubt, and unaided bodily human flight will be an accepted fact, as commonplace as phenomena of the wonderful forces called gravitation and light. It is well to doubt, but not to doubt too much.

The motive force of flight of all birds is not due to the flapping or fluttering of their wings. The motive power of the flight of birds is a specific force which is induced by them, which then enables them to make their long sustained flights, and by which they can move through the air without the flapping or fluttering of their wings. Birds use their wings to balance their bodies, and the tail as a rudder to guide the flight. The wings are also used to start the flight or to induce the motive force.

The force which a bird uses to fly is present with man as it is with a bird. However, man does not know of it, or if he is conscious of the force, he knows not of the uses to which it may be put.

A bird starts its flight by inbreathing, by stretching its legs, and by spreading its wings. By the movements of its breath, its legs and wings, the bird excites its nerve organism, so as to bring it into a certain condition. When in that condition it induces the motive force of flight to act through its nervous organization, similarly as an electric current is induced along a system of wires by the turning of a key on the switchboard of the system. When the motive force of flight is induced, it impels the body of the bird. The direction of the flight is guided by the position of the wings and tail. Its speed is regulated by the nerve tension and the volume and movement of the breath.

That birds do not fly by the use of their wings only is evidenced by the difference in wing surface as compared to the weight of their bodies. A fact worthy of note is, that there is a proportionate decrease in the wing surface or wing area of the bird compared to the increase of its weight. The birds of comparatively large wings and light bodies cannot fly as fast or as long as the birds whose wings are small as compared to their weight. The more powerful and heavy the bird the less it depends on its wing surface for its flight.

Some birds are light in weight as compared to the large spread of their wings. This is not because they need the wing surface for flight. It is because the large wing surface allows them to rise up suddenly and to break the force of their sudden fall. Birds of long and rapid flight and whose habits do not require them to rise and fall suddenly do not need and usually do not have large wing surface.

Another evidence that the motive force of flight of birds is not due to the surface and mechanism of their wings, is that whenever the occasion requires, the bird greatly increases its speed with only a slight increase of the movement of its wings or without any increase of wing movement whatever. If it depended on wing movement for flight an increase of speed would depend on an increased wing movement. The fact that its speed can be greatly increased without a proportionate increase of wing movement is an evidence that that which moves it is caused by another force than the muscular movements of its wings. This other cause of its flight is the motive force of flight.

To be concluded.

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FLYING.

MAN has the power to overcome gravitation and raise his physical body and take aerial flights in it, as surely as in his thought he can fly to distant parts of earth. It is hard for a man to discover and make use of his power over gravity and of flight, because his physical body is so heavy and because it tumbles down if he does not hold it up, and because he has not seen anyone rise and move freely through the air without mechanical contrivance.

The law called gravitation rules every particle of physical matter, reaches into and through the psychic emotional world and exerts a powerful influence on the mind itself. It is natural that gravitation should have its mysterious pull on physical bodies and cause them to feel heavy by drawing them towards its physical center of gravity—the earth center. The center of gravity in the earth pulls on the center of gravity in every physical body around it and compels every physical body to lie as flat on the earth as the pull can make it. This is why water finds its level, why an object falls until its heaviest parts are nearest to the earth, and why the physical body of man tumbles down when he does not hold it up. But when a man's physical body falls down because of the pull of gravitation, he can raise it up again if the thread of the life of that physical body has not been snapped by the fall. No one is surprised to hear that a man has fallen, because falls are of common occurrence, and everybody has experienced the fact of gravitation. Anyone would be surprised if he should rise in the air, because he has not had that experience, and he does not think he can overcome gravitation. When a man's body lies prostrate on the ground, how does he lift it and stand it on its feet and balance it there? To lift his bodily mass, the ligaments, muscles and nerves have been called into play. But what is the power which operated these and which really lifted the body? That power is as mysterious as the pull of gravitation. The pull of gravitation is overcome to the degree that the bulk of the body is raised from the ground. The same power by which a man makes his body lift

itself to its feet will enable him to raise that body into the air. It took man a year or more to learn how to lift his body, stand it on its feet and make it walk. This he can now do in a few seconds, because he has confidence and has taught the body how to do it. It will take man some time to learn how to raise his body into the air, if that is possible, by the same power with which he now lifts his body and stands it on its feet.

When man has learned how to raise and lower his body in the air, the proceeding will seem as natural and commonplace as standing up or sitting is now. In early childhood, standing up alone was a hazardous venture and walking across the floor was a fearful undertaking. It is not now so considered. It is now easier for the aviator to get into his aeroplane and fly through the air than it was for him in early childhood to stand up and to walk.

One who thinks that a human being cannot rise in the air without contact or extraneous assistance, and who says that such an occurrence would be without precedent or due to fraudulent practices, is ignorant of that department of history which deals with phenomena. In the literature of Eastern countries there are numerous accounts of men who have risen up from the ground, remained suspended in or moved through the air. These occurrences have been recorded for a great number of years down to the present, and have at times been witnessed by large gatherings of people. There are numerous accounts in the literature of the middle ages and in more modern times, of levitation of the saints of the church and of other ecstasies. Such phenomena have been recorded by sceptics as well as in church history. The history of modern spiritism gives numerous details of such phenomena.

It may be objected that such records were not made by competent men who were trained according to modern scientific methods of investigation. Such objection will not be made by the honest inquirer when he is furnished with evidence offered by a competent and trustworthy investigator of modern times.

Sir William Crookes is such an authority. In his "Notes of an Inquiry into the Phenomena called Spiritual," which were first published in the "Quarterly Journal of Science," January, 1874, and under the subhead, "The Levitation of Human Beings," he writes:

"The most striking cases of Levitation which I have witnessed have been with Mr. Home. On three separate occasions have I seen him raised completely from the floor of the room. Once sitting in an easy chair, once kneeling on his chair, and once standing up. On each occasion I had full opportunity of watching the occurrence as it was taking place.

"There are at least a hundred recorded instances of Mr. Home's rising from the ground, in the presence of as many separate persons, and I have heard from the lips of the three witnesses to the most striking occurrence of this kind the Earl of Dunraven, Lord Lindsay and Captain C. Wynne their most minute accounts of what took place. To reject the recorded evidence on this subject is to reject all human testimony whatever, for no fact in sacred or profane history is supported by a stronger array of proofs. The accumulated testimony establishing Mr. Home's levitations is overwhelming."

Man may fly through the air in his physical body by either one of two methods. He may fly in his physical body without any support or attachment whatever, or he may fly by the use of a wing-like attachment to his body. For a man to fly unaided and without any attachment, his body must become lighter than air and he must induce the motive force of flight. He who would fly with a wing-like attachment may have a heavy body, but to fly he must induce the motive force of flight. The first method is more difficult than the second. Few of those who are recorded to have risen and moved through the air have done so voluntarily and at a certain specified time. Many of those who are said to have risen and floated in the air have done so as the result of fasting, of prayer, of a diseased condition of body, or of their peculiar practices or habits of life. Their peculiar habits or practices or mental devotions acted on the internal psychic nature and imbued it with the force of lightness. The force of lightness dominated the force of gravity or weight of the body and raised the physical body into the air. It is not necessary for one who would rise and guide his movements through the air to become an ascetic, be diseased, or follow peculiar practices. But, if he would control the force of gravity or weight of his body and would induce the motive force of flight, he must be able to select a subject of thought and follow it to its conclusion without interruption from other trains of thought; and he must learn to dominate his physical body and make it responsive to his thought.

It is impossible for one to overcome gravity who is confident that he cannot. For a man to learn how to exert voluntarily an influence over the weight of his body, he must begin by having a reasonable confidence that he can. Let one walk to the edge of a high building and look down to the street, or let him look from an overhanging rock into the depths of a chasm. If he has not before had such an experience, he will draw back in fright or will clutch his support, to withstand the strange sensation which feels like a pull downward or as though he were falling. Those who have often had such experiences still instinctively push against their support to resist the strange force which seems to be drawing them down as they look into the depths. So great has been this drawing force that in certain cases it has required the efforts of several men to pull another of their number who would have fallen away from the edge of a great height. Yet, a cat could walk along the edge without the slightest fear of falling.

As such experiments will be evidence that the gravity or weight of the body may be increased by the pull or drawing force, other experiments will give evidence that gravity may be overcome by an exercise of the force of lightness. On an evening in the dark of the moon, when the stars are bright and there is no cloud in the sky, when the temperature is agreeable and there is nothing to disturb, let one lie flat on his back with outstretched arms on the ground, and in as comfortable a manner as he can. The place selected should be one where no tree or other object on the earth is within range of vision. Then let him look upward among the stars. Let him breathe easily and feel at rest and forget the earth by thinking of the stars and of his moving among them or in the spaces through which they move. Or let him select some place among a group of stars and imagine he is being drawn there or floating in space toward that point. As he forgets the earth and thinks of his moving freely in the vastness of the

stellar space, he experiences a lightness and a dropping away or absence of the earth. If his thought is clear and steady and unafraid, he will actually rise in his physical body from the earth. But as soon as the earth drops off he invariably is seized by fear. The thought of leaving the earth shocks him, and he sinks back and holds to the earth. It is well that such as have made this or a like experiment have not risen far from earth, because without further knowledge the lightness could not long have been maintained in thought. Gravity would have influenced the mind, unsteadied the thought, and the physical body would have fallen and been crushed on the earth.

But one who has been successful in an experiment to the point where the earth is about to fall away and leave him floating in space will never doubt the possibility of the free flight of man.

Why is a man's body influenced by his thought of weight or of lightness? Why will a cat or a mule walk along the brink of a precipice, while an ordinary man cannot with safety stand on its edge and look down? The cat or the mule will show no sign of fear so long as their footing is secure. They have no dread of falling, because they do not and cannot picture themselves falling. Because they do not imagine or form a picture of a fall, there is not the slightest likelihood that they will. When a man looks over the edge of a precipice, the thought of falling is suggested to his mind; and, if he does not lie flat, the thought is likely to overcome his poise and cause him to fall. If his footing is secure, he will not fall, unless he thinks of falling. If his thought of falling is strong enough, he will surely fall, because his body must follow its center of gravity when and to where that center is projected by thought. A man has no difficulty in walking on a board six inches wide and raised one foot from the ground. He is not likely to become giddy and fall off. But raise that board ten feet from the ground and he treads it cautiously. Let him attempt to walk over a bare bridge three feet wide and stretching across a gorge with a roaring cataract below him. If he gives no thought to the cataract or gorge and thinks only of the bridge on which he should walk, he is less likely to fall off that bridge than he is to fall off the board six inches wide. But few are able to walk safely across such a bridge. That man can learn to overcome to a degree the fear of falling is shown by the feats of acrobats. Blondin walked a rope stretched across Niagara Falls and met with no mishap.

Except when another force is brought to bear on physical bodies, all physical bodies are controlled by the force called gravity, or gravitation. Every physical body is by its gravity held close to the earth until means are used to dislodge it and the other force is used to raise it. That physical objects can be raised from the ground without any physical contact is proven by the "levitation of tables," or of "mediums," by a force used in spiritism. Anyone may draw a piece of steel along or raise it from the ground by the force exerted through a magnet.

Man can learn how to use a force which will overcome the force of gravity and give lightness to his body and cause it to rise into the air. To raise his physical body into the air a man must conform and attune its molecular structure to and charge it with the force of lightness. He can charge his molecular body with lightness by breathing and by certain

uninterrupted thought. Under certain conditions the raising of his body from the earth may be accomplished by singing or chanting certain simple sounds. The reason that certain singing or chanting may so affect the physical body is that sound has an immediate effect on the molecular structure of every physical body. When the thought of lightness is intent on the raising of the body and the necessary sounds are produced, they affect the molecular structure from within and without, and, given the proper rhythm and timbre, it will respond to the thought of lightness, which will cause the body to rise in the air.

One may apprehend the possibility of his raising his own body by the intelligent use of sound, if he has paid attention to the effect which music has produced on him and on others, or if he has had occasion to be present at certain religious revival meetings, at which some of those present seemed to be seized with a certain ecstasy and to have tripped so lightly over the floor as to hardly touch it while they sang. The statement often made by one of an enthusiastic gathering that "I was almost lifted out of myself," or, "How inspiring and uplifting!" after the rendering of certain music, is an evidence of how the molecular structure is affected by sound, and how the molecular body responds when in keeping with or agreeable to the thought. But then one is in a negative condition. To rise from the ground voluntarily he must be in a positive attitude of mind and must charge his molecular body by his voluntary breath and make it positive to the earth, with the force of lightness.

To charge the molecular body with lightness, to overcome gravity by breathing and rise in the air, one should breathe deeply and freely. As the breath is taken into the body, the endeavor should be to feel it as it seems to pass through the body. This feeling may be of a slight surging downward through the body and upward through the body with each inhalation and exhalation. The feeling is somewhat as though the breath passed through the entire body downward and upward. But the air that is breathed in does not so pass through the body. The apparent tingling or surging or feeling of the breath is a feeling of the blood as it circulates through arteries and veins. When one breathes easily and deeply and tries to feel the breath through the body, the breath is the carrier of the thought. As the air is drawn into the air chambers of the lungs, this thought which pervades it is impressed on the blood as the blood enters the pulmonary alveoli for oxygenation; and, as the oxygenated blood goes downward or to the extremities of the body, the thought goes with it and produces the feeling of the surging or tingling or breathing, to the extremities and back again, upward to the heart and the lungs. As the breathing continues and the thought of the breathing through the body and of lightness is continued uninterruptedly, the physical body feels as though all parts of it were alive and the blood, which is alive and which may seem to be the breath, is felt as it circulates through the entire body. As the blood circulates, it acts on and charges every cell in the body with the quality of lightness with which it is impressed. When the cells have been charged with the quality of lightness, an immediate connection is made between them and the inter-cellular or molecular form structure of the physical body to an inner breath, which inner breath is the true carrier of the thought of lightness. As soon as the connection is made between the inner

breath and the molecular form body of the physical, an entire change is produced throughout the body. The change is experienced as a sort of ecstasy. As the dominating thought directing the inner breath is of lightness, the force of lightness overcomes the force of gravity. The physical body then loses weight. If it remains on the ground where it stands, or reclines, it will be as light as thistle-down. The thought of rising is an order to the physical body to ascend, when the thought of ascending is uppermost. As the breath is inhaled, it is turned at the diaphragm into an upward current to the lungs. The inner breath so acting through the outer physical breath enables the body to rise. As the breath aspires there may come the sound as of a rushing wind or as the stillness of space. The force of lightness has then overcome gravity for the time, and man ascends into the air in his physical body in an ecstasy which he had not before experienced.

When man so learns to ascend, there will be no danger of his falling suddenly back to the earth. His descent will be as gradual as he desires. As he learns so to ascend, he will lose the fear of falling. When gravity is overcome, there is no sense of weight. When there is no sense of weight, there is no fear of falling. When the force of lightness is exercised, man may rise and remain suspended in the air at any height which is possible for physical breathing. But he cannot yet fly. A control of the force of lightness is necessary to the man who would fly in his physical body without any physical attachments or contrivances. But lightness alone will not enable him to fly. To fly he must induce another force, the motive force of flight.

The motive force of flight moves a body along a horizontal plane. The force of lightness moves a body upward in a vertical direction, while gravity draws it downward in a vertical direction.

When the force of lightness is controlled, the motive force of flight is induced by thought. When one has overcome the gravity or weight of his physical body by control of the force of lightness and has risen in the air, he will, naturally, induce the motive force of flight, because he will think of some place to which he would go. As soon as he thinks of direction to some place, the thought connects the motive force of flight with the molecular form body of the physical, and the physical body is moved forward by the motive force of flight, similarly as the electrical force induced by a magnetic current moves an object, such as a trolley car along a track.

One who has learned to fly by a control of the force of lightness and by use of the motive force of flight may travel great distances in little time or pass as leisurely through the air as he pleases. The speed at which he travels is limited only by the ability of the body to overcome the friction caused by its passage through the air. But friction, too, may be overcome, by the control of his own atmosphere and by learning to adjust it to the atmosphere of the earth. The thought guides the motive force of flight and causes it to act on the molecular form body, which moves the physical to whatever place one desires to go.

Flight by such means as here indicated may seem impossible at present. It is impossible for some at present, but it is possible for others. It is especially impossible for those who feel sure that it is impossible. It is not likely that those who believe it possible will learn how to fly in the

manner here described, for, though the psychic organism necessary to work with may be theirs, they may lack mental qualities, such as patience, perseverance, control of thought, and may not be willing to acquire these qualities. Still, there are a few who have the psychic organism and the mental characteristics necessary, and for these it is possible.

Those who object to giving the time and the exercise of thought necessary to success are not the ones who will achieve the art of rising and moving through the air in their physical bodies, without mechanical means. They forget the length of time it took, the difficulties they had to overcome and the assistance given by their parents or teachers before they were able to control the movements of their physical bodies. Greater difficulties than those must be overcome and more time spent before man will be able to acquire the power to fly without physical means. The only assistance which he may expect is the faith in his own inherent knowledge and in his latent power.

The body of man is born with the potential ability to walk and to control his physical movements, which tendencies are inherited from his parents and a long line of ancestry. It is possible that in an early age man had the power to fly which would account for the seemingly strange notions preserved and handed down to us in the mythologies and legends of the Greeks, the Hindus and other ancient races and that he lost the power as he progressed and took greater interest in his physical and more material development. Whether or not man in earlier ages could fly, he must now train his thought and adapt his physical body to the purpose if he intends to guide his movements through the air as naturally and more readily than he now guides his physical body on the earth.

It is more likely that man will learn to fly by the second method of flight, which is by a slight physical attachment to his body, than the first means of flight, which has been briefly outlined.

The second means of flight which man may learn is to fly as birds fly, by the motive force of flight, without the overcoming of gravity and without decrease of the weight of his physical body. For flight of this kind it will be necessary to contrive and use a wing-like structure, so fastened to the body that it may be used with the ease and freedom with which birds use their wings. Let it be understood that the power to fly depends on his ability to induce the motive force of flight, and not on the flapping or the fluttering of the wing-like structure which he will attach to his body. The wing-like contrivance will be used to rise in the air when the motive force of flight is induced, to maintain a balance in the air, to guide the body in any desired direction, and to descend gradually on any place without injury to the body.

Preparatory to inducing the motive power of flight, one should train his body and his thought to the achievement of flight. Morning and evening are the times best suited to accustom the body to such undertaking, and exercising the thought with the object of flight.

In the calm of the morning and the evening let the one who has deep and quiet faith in himself and who believes it possible for him to fly stand on a slight rising on a broad plain or on a hill commanding a broad and uninterrupted view of land undulating into the distance. Let him look over

the broad distances as intimately as he looks on the place on which he stands, and let him think of the lightness and freedom of the air as he breathes deeply and regularly. As his eye follows the undulations into the distance, let him have a longing to reach out and soar, as he knows the birds can, over the scene below him. As he breathes, let him feel that the air he draws in has a lightness, as though it would lift him upward. When he feels the lightness of the air, he should hold his legs together and raise his arms to a horizontal position with palms downward as he inhales the light air. After continued practice of these movements, he may have a feeling of a calm joy.

These exercises and this feeling attunes the molecular form body within and throughout the physical matter of his body to the motive force of flight. As the exercises continue without lack of confidence in his inherent power to fly, he will through his molecular form body sense the proximity of the motive force of flight, and he feels as though like a bird he, too, ought to fly. As he brings his molecular form body into touch with the motive force of flight, he will in one of his exercises, simultaneously with his inbreathing, reach outward with his arms and legs with a motion as of swimming, and he will by thought intuitively connect or induce the motive force of flight to act on the molecular form body of his physical, and he will be impelled forward. By a slight pushing of his feet from the ground he will be carried forward a short distance through the air, or he may drop after only a few feet. This will depend on the fitness of contact between his molecular form body and the motive force of flight, and upon his power of thought to continue the relationship which he had established between them. The contact once established, however, will give him assurance that he can fly.

But although he has demonstrated to his physical senses that there is the motive force spoken of, he will not be able to fly without some contrivance to answer the purpose of the wings and tail such as a bird uses. To induce the motive force of flight without a wing-like attachment to his body would be dangerous or disastrous to the physical body, because when induced the motive force would impel the body forward, but man would not be able to guide his flight and he would be forced along the ground without ability to give direction except as he might from time to time reach out with his hands or push the ground with his feet.

To obtain evidence that the motive force of flight is not a fancy nor figure of speech, and to see the results of the action of and the use of the motive force of flight, one should study the flight of some birds. If the study is conducted mechanically, it is not likely that he will discover the motive force of flight nor understand how the birds induce and use it. His attitude of mind in observing birds and their movements should be one of sympathy. He should try to follow the movements of a bird, as though he were in that bird. In this attitude of mind he is more likely to know why and how a bird moves its wings and tail as it does, and how it increases and decreases its flight. After he knows the force or the use to which it is put by birds, he may subject its action to exact measurements and tests. But before he has discovered it he should not look for it mechanically.

Among the birds which use the motive force of flight to fly are the wild goose, the eagle, hawk, and the gull. One who desires to study the motive force in action should seek an opportunity of observing these. The best time to observe wild geese in flight is in the evening and the morning in the fall of the year, when they are migrating southward to escape the northern winter. The best place to observe their flight is along the banks of one of the ponds or lakes at which they are accustomed to alight during a journey of often thousands of miles. A flock of geese fly too high, when they do not intend to alight, for a student of flight to get good results from observation of their movements, so let him observe them, if he can, at a lake or pond where they intend to take rest before continuing their long flight. As geese are very wary and have a keen instinct, the observer should be concealed from view and should have no firearms with him. As he hears the honk and looks up, he will be impressed by the heavily built bodies sailing through the air swiftly and easily, accompanied by the regular movement of their wings. At first glance it might seem as though these birds flew by means of their wings. But as the observer gets in touch with one of the birds and feels its movements, he will find that the wings do not enable that bird to fly. He will find or seem to feel that there is a force which contacts the nervous organism of the bird and drives it onward; that the bird moves its wings as it does, not to force itself forward but to balance its heavy body through the variable currents of air, and with its regular breathing to excite its nervous organism which keeps its molecular form body in touch with the motive force of flight. The large body of the bird is too heavy to allow it to hover, with its comparatively small wing surface. The wings are muscular and strongly built because of the long continued muscular movements while flying. If the observer has examined the body of a wild goose, he will become aware that the speed with which it flies is not developed by beating the air with its wings. The movements of the wings are not rapid enough to produce such speed. As the bird lights on the water, the current of the motive force of flight is turned off by a change in its breathing and by ceasing the movements of its wings. In watching one of the flock as it is about to rise from the water one may in thought feel that it breathes deeply. He will see that it flaps its wings once or twice, and he can almost feel the motive current when the bird gets impetus as it pushes downward with its feet and tail and glides easily up into the air.

The eagle or hawk may be observed under different conditions. At any time in pleasant weather while walking over the fields one may see a hawk gliding silently and apparently without effort through the air, as though it floated or was blown onward by the wind. The dullest mind will be impressed by that easy glide. The student of flight has an opportunity to detect the motive force which carries the bird forward and to learn the use and purpose of its wings. Let him be still and in thought get within that bird and feel as it does in flight, and learn in thought to fly as it does with its body. As it is borne onward, a new current of air is entered, and the wings rise and fall to meet the change. As soon as the body is adjusted to the currents, it soars on and with keen sight looks down on the fields. Some object attracts it, and, without fluttering its wings, it darts downward; or, if the object is not for it, adjusts its wings, which meet the

air and carry it upward again. Having attained its accustomed height, it soars onward again, or, if it wishes to wait until the object in sight is ready for it to take it, it decreases the motive force and sweeps in graceful curves until it is ready to descend. Then down it shoots. As it nears the ground, it turns off the motive current, raises its wings high, drops, then flutters to break its fall, and its claws clasp around the rabbit, chicken or other prey. Then, by breathing and by flapping its wings, the hawk induces the motive current to contact the molecular body. With flapping wings it forges on and up again until the motive current has full contact and it is away from the earth disturbance.

As the observer moves in thought with the bird, he may feel through his body the sensations of that bird. He may feel the position of the wing and tail that carries the body upward, the changing of the horizontal position of the wings when it sweeps to the left or to the right, the ease and lightness of soaring, or the acceleration that comes with increased speed. These sensations are felt in the parts of the body corresponding to those of the bird. The motive force of flight impels the body which it contacts. As the bird is heavier than air, it cannot remain suspended in mid-air. It must keep moving. There is considerable wing movement while the bird remains near the ground, because it has to overcome the disturbance at earth level and because the motive force of flight is not so easily contacted as at higher levels. The bird flies high because the motive force works better at high altitudes than at earth levels and because there is less danger of its being shot.

The gull affords opportunity for study at close range. Gulls will for many days accompany a passenger boat on its journey, and their number will be greatly increased or diminished from time to time during the journey. The observing passenger may study birds at close range for hours at a time. His time is limited only by his interest and endurance. A pair of high power binocular glasses will be of great assistance in following the flight of any bird. With their aid the bird may be brought very close. The slightest movement of head, feet or feathers may be seen under favorable conditions. When the passenger has selected his bird and has brought it close to him with the binoculars, he should follow it in thought and in feeling. He will see the turning of its head from this side to that, will notice how it drops its feet as it nears the water, or feel how it hugs them to its body as it breasts the wind and sails swiftly onward. The bird keeps pace with the boat, however fast it may go. Its flight may be maintained for a considerable time or, as some object attracts it, it darts downward in great haste; and all this without the movement of its wings, even though a brisk head-wind be blowing. How can the bird, unless it is impelled by a force not generally known to man, go as fast and faster than the boat and against the wind and without the rapid movement of its wings? It cannot. The bird induces the motive force of flight, and the observer may sometime become aware of it, as he thoughtfully follows the bird and experiences somewhat of the sensations of its movements in his body.

The student may learn from each of the large and strongly built birds accustomed to long flight, such as the falcon, the eagle, the kite or the albatross. Each has its own lesson to teach. But few birds are as accessible as the gull.

When a man has learned of the birds their secret of flight and the uses which they make of wing and tail and has demonstrated to himself the existence of a motive force of flight, he will be qualified and will build an attachment for his body, to be used as a bird uses its wings and tail. He will not at first fly as easily as do birds, but in time his flight will be as sure and as steady and as long sustained as that of any bird. Birds fly instinctively. Man must fly intelligently. Birds are naturally equipped for flight. Man must prepare and equip himself for flight. Birds have little difficulty in getting control of their wings and in inducing the motive force of flight; they are prepared by nature and through ages of experience for flight. Man, if he ever had it, has long lost the power to induce the motive force of flight. But for man it is possible to attain all things. When he is convinced of the existence of the motive force of flight and prepares and demonstrates to himself that he can induce or command its aid, he will not be content until he has wrested from the air its secrets and can speed through it and ride its currents as easily as he now rides on land and water.

Before man can begin to try to attain what is possible for him, he must first be made aware of it. Already the aviators are preparing the mind and accustoming it to think of flight. They should discover many of the currents of the air, the ratio in the decrease of the power of gravity with the ascent of the body, the lessening of the fear of falling with the decrease of gravity, the effects on the physical body and on the mind of the gradual or sudden rise to high altitudes; and, it is possible that during one of his flights one among them may induce the motive force of flight. The one who does so may learn and at once increase the speed of his aeroplane as the force impels him on. It is not likely that if he is able to induce the motive force of flight he will be able to fly with it without use of his motor, because the aeroplane is not adjusted to his body, and because he cannot control it as he could a wing-like attachment to his body, because his body would not of itself stand the resistance of the car as the motive force of flight pushes him onward, and because it is likely that the weight of the aeroplane will be more than the body should attempt to force onward. Man need not attempt to use any attachment heavier than the weight of his body, once he is able to induce and use the motive force of flight.

In flying by means of the use of wings, man will not be free from the danger of falling if the attachment should break or he loose control of it, because he has not freed the body from the force of gravity. The one who without any attachment frees the body from its gravity by a control of the force of lightness, and moves through the air by inducing the motive force of flight, runs no risk of falling whatever, and his movements can be very much more rapid than those of the other. Whichever mode of flight is attained, it will bring about great changes in the bodies, habits and customs of the people. Their bodies will become lighter and finer, and people will find their chief pleasure and enjoyment in flying. The pleasure now found in swimming, dancing, speeding or swift movement of body is only a slight foretaste of the exquisite pleasure which will be found in flying.

Who can say when this will be done? It may not be until centuries hence, or it may be tomorrow. It is within the reach of man. Let him who will fly.



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