NEW FLYING MACHINE.

Invented by Lilienthal, a Rich German Scientist.

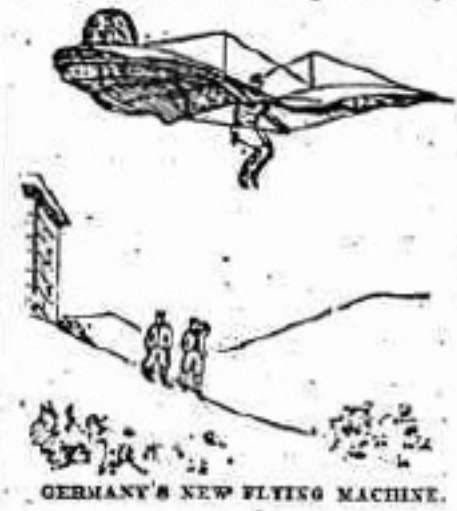
It Has Wings Like a Bat's, and the Inventor Put It to Test, Reaching Fully One Thousand Feet in the Air.

The problem of flying has been solved, it is claimed by a rich scientist, in Berlin, Otto Lilienthal, who, undismayed by the failures of the hundreds who have preceded him in the same line of effort, has experimented until he can now claim, apparently with some reason, to have achieved success.

The Lilienthal theory is that birds do not exercise great power in flying, but keep afloat in the air by the particular way in which they manipulate their wings. Reasoning upon these lines, a flying machine has been constructed upon a variety of angles, designed to catch the air in whatever direction it may come, or from whatever quarter.

The affair is built in almost exact imitation of the wings of a bat; the delicate ribs and body are made of willow wood, which is tough, but light; the wings are covered with light sheeting, and when spread they have a circumference of twenty square yards. The entire apparatus weighs forty pounds.

Lilienthal began his trials with the new flying machine from the summit of a turret which rises forty feet from the ground. Adjusting the wings as shown in the accompanying illustration, and seating himself upon the skeleton body of the mechanism, which, unfortunately, must be imagined in the drawing, as the artist has considered it so exceedingly frail as to make it indistinguishable, the inventor pushed himself off from the tower top into space, as one would push away a



GERMANY'S NEW FLYING MACHINE.

boat from the bank. Working the wings with little effort, the man fluttered through the air, finally reaching a height of 200 feet above the surface, and then descending safely.

After this experiment, which satisfied him of the practicability of his theory, Mr. Lilienthal resolved to gradually increase the altitude, and for this purpose he went to the steep hill of Rhinower, near Rathenow, which rises to an abrupt height of 320 feet, its side being a stony cliff almost perpendicular. On the top of this hill he built a small tower, making the entire distance from the level 350 feet.

Then he adjusted his flying apparatus and leaped off. Upon his first trial he sank perhaps fifty feet, and then commenced to rise again until he had reached 1,000 feet, and then gradually floated down, alighting gently upon the road.

Repeating his experiments for several days, he eventually reached such perfection that he was able to stand still in the air without moving the wings. He also traveled in circles, steering himself by the appliance, which will be noticed in the sketch as a semi-circular attachment, doing the same duty as a rudder as that done by the tail of a bird.

To a moderate degree Mr. Lilienthal appears now to have accomplished the aerial movements of the bird, and it only remains to be seen whether he can sufficiently perfect his system to rise to great heights or to remain aloft with the same endurance as do the creatures designed by nature for that purpose.

The scientist's description of the sensation while sailing through the air is certainly attractive. He says that the feeling of motion is entirely lost, so easy and free from fatigue is it. The absence also of any stationary objects, which would indicate movement in the human being, gives the sensation that the earth, instead of the man himself, is in motion.