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THE NINTH ANNUAL LEPINE EXHIBITION OF TOYS IN PARIS.

BY JACQUES BOYER.

This year's Lépine exhibition of toys, like that of last year, contains many toys relating to aviation. Kites of strange designs, aeroplanes, and dirigible balloons are shown in great numbers.

Richer's "Modern War" represents an attack upon an airship, which carries a target consisting of two crossed flags. The projectile, which is shown in the center part of our photograph, is a small aeroplane made of wood and celluloid. It consists of a wooden spindle with a longitudinal slot for the reception of the wings. A screw propeller is attached at the stern. The projectile is launched by means of a pistol, the barrel of which also has a longitudinal slot through which the wings of the aeroplane pass. When the target is struck the balloon separates into two parts, as shown in the illustration.

The "Roulis-Bilboc" of the same inventor is a little

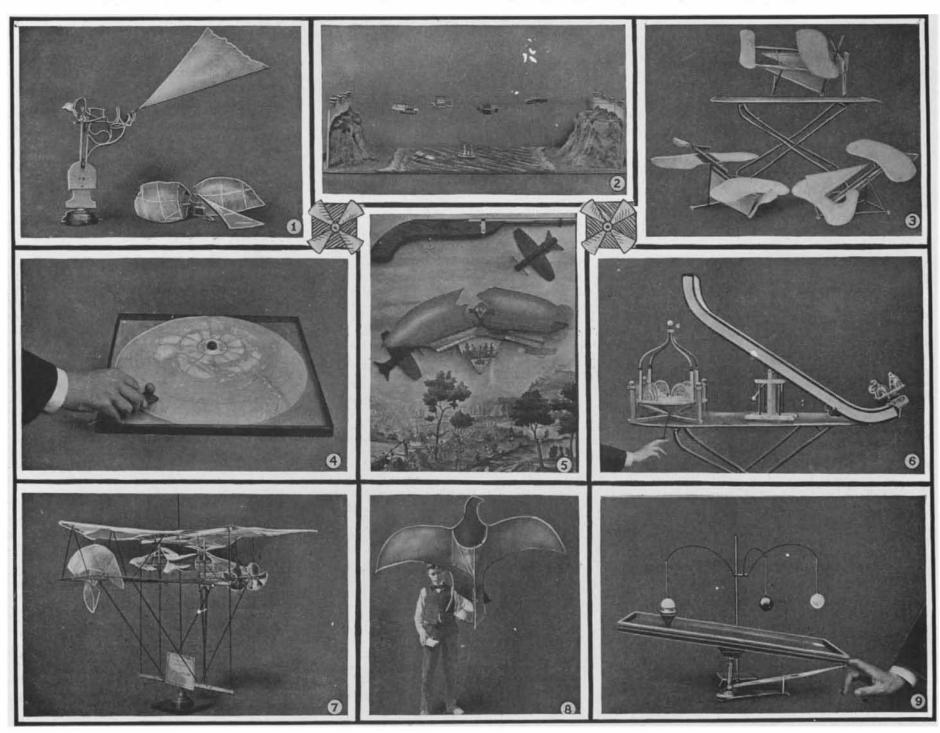
axis of the fiyer and two for steering at the other end, the axes of these being at right angles to that of the large one. Above this frame is a plane surface having two circular openings immediately above the lifting propellers, and four valves in the form of rectangular doors, hinged at their front edges, which open and allow the air to pass during the ascent of the "Avion," but close as soon as it begins to fall. All of these propellers are driven by explosion turbines of a type invented by M. Uhlenhuth.

The "Fil-Vit" is a self-starting aeroplane, three forms of which are shown in one of the photographs. Part of the flight is accomplished by means of screw propellers driven by stretched rubber bands, the other part by soaring. One of the types is a Wright biplane with two propellers at the bow. It rises from the ground by its own effort, and accomplishes a flight of fifty yards. Another is a monoplane with one bow and one stern propeller, which also rises unaided and flies fifty yards. The third is a biplane with two bow

measuring 10 by 30 yards. These great birds of prey have for some time been seen soaring majestically over the Paris boulevards.

Clément's "Whirlwind" is simply a seesaw having curved ends and a longitudinal grooved channel in which a car moves. The "Leaping Plate" (shown on the left of Fig. 6) is a platform resting upon four springs, which can be depressed more or less by pulling a cord. On the platform is placed a ball which, by operating a cord and thus tipping the platform, is caused to strike and knock down little puppets, seated on benches around the edge,

Blin's "Polar Billiard Table" represents, in relief, the scene of the recent exploits of Cook and Peary. The North Pole is represented by a small depression. The convex polar region rests upon a square table with a raised edge. The game is played by four persons, and consists in pushing a pith ball, with the aid of a flat wooden blade, up the convex surface and into the hole at the pole. The rotundity of the surface and the



1. The "Mechanical Bird" and its propeller. 2. The Flight Across the Channel. 3. The "Fil-Vit." 4. The North Pole Game. 5. "Modern War." 6. The "Whirlwind." 7. The "Avion." 8. The "Aigloplan." 9. The "Roulis-Bilboc."

STRIKING TOYS AT THE NINTH ANNUAL LEPINE EXHIBITION, PARIS.

billiard table mounted upon a spherical joint, which allows it to be turned and tipped in every direction. By the side of the table is a vertical support, on which slide three wires terminating in hooks, from which three balls are suspended at a determined height above the table. The game is played by means of a top, the upper part of which is hollowed out to form a hemispherical cup of a diameter equal to that of the balls. The player winds the top and sets it spinning on the table, which he then moves in such a manner, by means of the lever, as to bring the top directly under one of the three suspended balls, and then tips the table so as to catch the ball in the cup and remove it from its support.

The "Avion" and the "Mechanical Birds" of Le Dantec are aeronautic novelties. The "Avion" is supported, propelled, and steered entirely by screw propellers driven by turbines. The "Avion" itself is formed of an assemblage of metal tubes which support a horizontal frame. This frame carries two horizontal propellers for support and ascension, and three vertical propellers, one for propulsion at one end of the

propellers, which rises after running two yards on the ground and makes a flight of one hundred yards, gradually rising to a height of five yards.

Blin's "Crossing the Channel" is a simple but novel and attractive racing game. Starting from the French coast as Blëriot did, the aviators, represented by little paper figures, endeavor to reach the cliffs of England. The aeroplanes are attached to elastic cords, which are stretched between pulleys on the two coasts. Each player, by turning his pulley, causes his aeroplane to advance, but also produces vibrations which frequently result in a fall into the sea, which for the sake of realism is dotted with little vessels.

The "Aigloplan" is simply a large kite representing an eagle. The frame is formed of whalebone, steel, and bamboo. The wings and head of the bird are rigid planes, and the body is represented by four rectangular pieces of very stiff canvas. The lifting power of the kite is sufficient to make it available for experiments in aerial photography and wireless telegraphy, and its constructor, M. Gueneau, uses it for advertising purposes. The largest of these kites can carry a banner

flatness of the blade conspire to make this task more difficult than it might appear.

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These are some of the most striking novelties to be seen at the Ninth Lépine Exhibition. Many others might have been included if space allowed. For example: "The Luminous Flames," a game of skill which is enlivened and adorned by miniature electric lamps, many very curious toys, safety hat pins, automobiles, boats, locomotives, and other artistic and original creations which demonstrate the skill and activity of the members of the "Société Française des Petits Fabricants."

Petroleum as a disinfectant for checking the spread of plague is advocated by some medical officers in India. It is pointed out that during the pestilence that swept Europe long ago the oil regions of Baku were untouched, although in the surrounding country 50 per cent of the population perished. Lerche, who visited Baku in 1735, wrote: "It is quite likely that the fact that the Black Death did not touch Baku was due to petroleum."