carriers, which reached Paris on the 21st of January, 1871, a few days previous to the armistice, carried alone nearly 40,000 despatches.

The pigeon that brought the news of the victory of Coulmiers started from La Loupe at ten o'clock in the morning on the 10th of November, and reached Paris a few minutes before noon. The account of the Villejuif affair was brought from Paris to Tourcoing (Nord) by a white pigeon belonging to Mr. This pigeon is now preserved in a stuffed state Descampes. in the museum of the city. The carrier pigeon service was not prolonged beyond the 1st of February, and our winged biothers of arms were sold at a low price at auction by the government, which, once more, showed itself ungrateful to its servants as soon it no longer had need of their services. After the commune, Mr. La Perre de Roo submitted to the president of the republic a project for the organization of military dove cotes for connecting the French strongholds with each other. Mr. Thiers treated the project as chimerical, so the execution of it was delayed up to the time at which we saw it applied in foreign countries.



FIG. 1.—THEORETIC MAP OF THE FRENCH SYSTEM OF MILITARY DOVECOTES.

In 1877, the government accept d a gift of 420 pigeons from Mr. De Roo, and had the Administration of Post Offices construct in the Garden of Acclimatization a model pigeon house, which was finished in 1878, and was capable of accommodating 200 pairs.

At present, the majority of our fortresses contain dove cotes, which are perfectly organized and under the direction of the engineer corps of the army.

The map in Fig. 1 gives the approximate system such as it results from documents consulted in foreign military reviews.

According to Lieutenant Gigot, an officer of the Belgian army, who has written a very good book entitled *Science Colombophile*, a rational organization of the French system requires a central station at Paris and three secondary centers at Langres, Lyons and Tours, the latter being established in view of a new invasion.

As the distance of Paris from the frontier of the north is but 143 miles at the most, the city would have no need of any intermediate station in order to communicate with the various places of the said frontier. Langres would serve as a relay between Paris and the frontier of the northeast. For the places of the southeast it would require at least two relays, Lyons and Langres, or Dijon.

As Paris has ten directions to serve, it should therefore possess ten different dove cotes of 720 birds each, and this would give a total of 7,200 pigeons. According to the same principle, Langres, which has five directions to provide for, should have 3,600 pigeons.

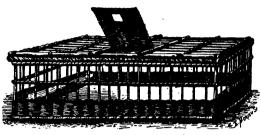


FIG. 2.—BASKET FOR CARRYING PIGEONS.

Continuing this calculation, we find that it would require 25,000 pigeons for the dove cotes as a whole appropriated to the frontiers of the north, northeast, east and southeast, without taking into account our frontiers of the ocean and the Pyrenees.

A law of the 3d of July, 1877, supplemented by a decree of the 15th of November, organized the application of carrier pigeons in France.

One of the last enumerations shows that there exist in Paris 11,000 pigeons, 5,000 of which are trained, and in the suburbs 7,000, of which 3,000 are trained. At Roubaix, a city of 100,000 inhabitants, there are 15,000 pigeons. Watrelos, a small neighbouring city of 10,000 inhabitants, has no less than 3,000 carrier pigeons belonging to three societies, the oldest of which, that of Saint-Esprit, was founded in 1869.

In entire France, there are about 100,000 trained pigeons, and forty-seven departments having pigeon fancying societies.

Germany.—After the war of 1870, Prussia, which had observed the services rendered by pigeons during the siege of Patis, was the first power to organize military dove cotes.

In the autumn of 1871, the Minister of War commissioned Mr. Leuizen, a very competent amateur of Cologne, to study the most favorable processes for the recruitment, rearing and training of carrier pigeons, as well as for the organization of a system of stations upon the western frontier.

In 1872, Mr. Bismarck having received a number of magnificent Belgian pigeons as a present, a rearing station was established at the Zoological Garden of Berlin, under the direction of Dr. Bodinas.

In 1874, military dove cotes were installed at Cologne, Metz Strassburg and Berlin. Since that time there have been organized, or at least projected, about fifteen new stations upon the frontier of France, upon the maritime coasts of the north, or upon the Russian frontier.

B-rlin remains the principal rearing station, with two pigeon houses of 500 pigeons each; but it is at Cologne that is centralized the general administration of military dove cotes under Mr. Leutzen's direction. The other stations are directly dependent upon the commandant of the place, under the control of the inspector of military telegraphy. The Wilhelmshaven dove cote, by way of exception, depends upon the Admiralty. In each dove cote there is a subofficer of the engineer corps and an experienced civil pigeon fancier, on a monthly salary of ninety marks, assisted by two orderlies. In