NAVAL MESSENGER PIGEON SERVICE.

BY MAJOR HOWARD A. GIDDINGS.

The military use of messenger pigeons has grown up since the Franco-Prussian war, when pigeons were first extensively used, during the siege of Paris. In France, Germany, Austria, Italy, Spain and Portugal, the organization of military pigeon posts is now very complete, some of the nations owning upwards of six hundred thousand birds. As homing pigeons are of no use as bearers of messages except after long and careful training, a service of messenger pigeons for naval or military use could not be improvised at short notice.

The United States naval messenger pigeon service has now been in existence for three years, under the charge of Prof. Henri Marion, United States Naval Academy, who has frequently urged that a permanent service be established along the Atlantic coast, from Portland, Maine, to Galveston, Texas.

A connected system of twelve main naval pigeon lofts is advocated, to be established at the following navy yards and stations: Portsmouth, Boston, Newport, New London, Brooklyn, Philadelphia, Washington, Annapolis, Norfolk, Port Royal, Key West and Pensacola. The system could be extended and complete by establishing secondary stations at Cape Hatteras, Cape Charles, Cape Henlopen, Wilmington, St. Augustine, Jupiter Inlet and Tampa, Florida.

At present our principal naval pigeon station is at the United States Naval Academy at Annapolis, Maryland, with branches on the cruiser New York and U. S. P. C. Constellation. The accompanying chart, prepared by Prof. Marion, shows the position of the Constellation when birds were liberated during a recent cruise, and also shows the proposed messenger pigeon stations along the Atlantic coast, with circles of two hundred and forty miles radius around each station, indicating the zone within which trained pigeons could be relied upon to return to the home station. The distance could be covered by a pigeon in about eight hours, at an average speed of thirty miles an hour.

The sole merit of the homing pigeon for military purposes lying in its service as a messenger, breeding and training, are directed to the development of the most resolute homing qualities. The gradual training of the birds begins as soon as they attain sufficient strength for their first short flights. They are first made familiar with the appearance of the locality about their station, but further training contemplates the invariable employment of the same birds over practically the same course. Thus the mark "E" indicates that the bird is trained to return from the East, "N" from the North, etc. The bird has strong proprietary instincts and dislike of change, as is shown by the tenacity with which it seeks its loft after liberation. All possible deference is paid to this trait in its character, no bird being forced to vacate the nest or perch originally assigned to it except for urgent reasons.

The young birds in their first season are trained to return from a distance of one hundred miles, which is accomplished, as is all their training, by teaching them to return first from a very short distance, gradually increasing it at each successive lesson. The second season the distance is somewhat increased, and the third season a return of three hundred miles or over is accomplished.
The common belief that these birds find their way home by instinct is a mistake. Their flight is guided by sight alone. When a pigeon is liberated it rises to a great height in the air, in constantly enlarging circles, until it catches sight of some familiar landmark by which to direct its course. When liberated from a balloon at too great a height for objects to be seen upon the earth by even its piercing vision, it drops like a plummet until it nears the earth, when it begins to wheel around in a descending spiral until it finds its bearings.

The average speed of the messenger-pigeon is thirty miles an hour. Although these birds may for a short distance or in exceptional cases attain great speed, they cannot ordinarily in a long flight exceed this rate. Even this speed cannot be maintained without rest, for the pigeon has not the endurance of many birds of passage. For this reason it can fly farther over land than across water. When released at sea pigeons fly direct to land, and then take their bearings. The steamer *Waesland* once liberated a bird three hundred and fifteen miles from Sandy Hook at one p. m., and it was in its loft the same evening.

Ordinarily pigeons will fly in only one direction, i. e., toward home, and it is therefore necessary to have birds at both ends of the route to keep up communication. By pairing birds in one place and feeding them in another, they may be made to perform what is known as a “there-and-back flight.” This finds its best application between light-ships and light-houses, and the shore, when the distance is not over fifty miles.

The frequent trips made by vessels along our coast offer every facility for training birds for the naval service. By sending birds on outward-bound vessels they would become accustomed to flights over the routes for which they are intended to be used in case of actual necessity. It must be remembered that these birds when properly trained offer an almost sure means of quick communication where none other could possibly be employed. Their value in time of war cannot be estimated. Suppose that a cruiser left our coast and, when a day out, unexpectedly sighted the enemy. Eight or ten hours’ notice might be given by pigeons, and millions of dollars worth of property saved.

In peace, the birds would be useful in giving notice of wrecks, fire at sea, lack of food, water or coal, or of any accident to vessels or machinery, if happening near the coast, and could frequently relieve the anxiety of friends of passengers on vessels overdue, as well as to
enable the owners to send assistance. When, in October, 1883, a light-ship broke adrift from her moorings twenty-two miles from Tornung, off the mouth of the Eider, four pigeons were liberated from the ship and brought the news in fifty-eight minutes.

The value of messenger pigeons for use in peace and war, on sea or shore, requires no longer to be proved. In the year 1870, when the Germans arrived under the walls of Paris and cut off all communication except by balloon, large numbers of pigeons were taken out in nearly every balloon and placed under the charge of the Government officials at Tours. They were regularly employed as messengers into Paris from the first of October to the fourth of November, one hundred and fifteen birds being used in that time; when the pigeon system became so well organized that the delegation of Tours issued a decree announcing that any member of the Republic might correspond with Paris by means of the messenger pigeons at a charge of five hundred centimes per word. This charge was afterward reduced to twenty centimes.

In order to transmit the enormous number of dispatches sent into Paris they were set up into type and photographed on a very thin film of collodion, being reduced about five hundred times in the process. Each film contained on an average twenty-five hundred dispatches. When the films arrived in Paris, being transparent, they were put between two pieces of glass in an electric magic lantern, the messages being thus thrown in large characters on a screen could be copied by a large number of clerks at once.

The films were carried in the usual message quill, about an inch and a quarter long, sealed at the ends and attached to the under side of the principal tail feather of the bird. A bird could easily carry a dozen films in a quill, making thirty thousand dispatches. This number was sometimes exceeded, a pigeon arriving in Paris on the third of February carrying eighteen films holding forty thousand messages. In this way, while Paris was in a state of siege, with all other communication cut off, one hundred and fifty thousand official and one million private dispatches were transmitted. These messages, if printed in ordinary type, would fill nearly five hundred library volumes.

The fact that messenger pigeons can fly several hundred miles at sea, and can be bred and trained on board ship, as well as accustomed to the report of guns, greatly enhances their value for naval service. They afford a most valuable means of distant communication at sea, and should receive the development and encouragement which they merit by the maintenance of a permanent system of naval messenger pigeon lofts at the principal navy yards and stations along our Atlantic coast.

A ROUGH-AND-READY FOX-HUNT.

BY HERMAN RAVE.

The Judge, the Attorney, the Farmer, the Township Trustee, the Poet and the Master of the Hounds—these were to compose the party, and the chase was to start from the old town of Charles-town, perched on the hills of southern Indiana, and follow wherever luck and the fox might lead.

The Attorney and the Poet had come up the previous evening, very enthusiastic, and vowing that five a. m. was their usual hour of rising, but when the bugle sounded under the windows of the old-fashioned hotel on the morning of the hunt, they were loath to rise in chilly darkness and face the raw morning air.

Lights flitted along the corridors of the house; a negro boy came into the room and lighted a fire; a clatter of dishes was heard downstairs. On the street the glowing points of cigars, the murmur of voices, the clang of impatient hoofs, and an occasional yelp, proved that the hunters were out in force and waiting.

Again the bugle called, and the two