

The Evolution of Bird-Song.

Mr. C. A. Witchell, writing upon the voices of British wild birds in a recent number of the *Zoologist*, contends that all birds possess the power to emit a cry of distress—that is, an exclamation caused by bodily pain, or by fear, and this cry seems to be the first utterance of the young of most species. It is presumed that a cry of distress was the earliest vocal utterance within the ability of the bird or its progenitors; and it may have been originally produced accidentally by contortion of the body during combat, in which event it might have tended towards the preservation of the individuals by whom it was uttered. If an outcry increased the chance of victory in combat, the inclination and ability to exclaim would become permanent, and the cry would be habitually uttered in the tone most easily produced, or most effectual in its result. It would thus become a definitely formed cry, and would soon be uttered in circumstances of danger as well as in combat. In most birds of limited vocal compass, the distress cry is merely an exaggeration of the ordinary call-note or signal of assembly, as, for example, in the mallard, crow and rook; but fear may induce in the call-note inflections unappreciated by the human ear. It is a curious fact that among birds of limited vocal power the call-note resembles the danger-cry (or alarm) much more than in birds of varied song. The mallard, crow, rook and bullfinch may be mentioned as typical of the former class; and the blackbird, starling, redbreast and nightingale as typical of the latter. This tends to prove that the call-note and the danger-cry had a common origin, namely, the cry of distress. This distress-cry became modified in different species, and for different occasions, and developed into a cry of dismissal as well as into a call of assembly. The house sparrow utters a characteristic note to indicate the arrival of a hawk, at the sound of which house sparrows within hearing secrete themselves. This bird has another danger signal, which is employed as a call-note to the young. Several species silence their young by a note of warning. I have known a blackbird utter different notes to announce the presence of a cat or a human being. The common fowl (whose notes generally have withstood the influence of artificial selection) utters different alarm-cries to signal the approach of a dog or cat or that of a hawk. It may be fairly suggested that certain alarm notes are onomatopoeic, and are intended to suggest the presence of the seemingly most dreaded enemies of the bird.

It is believed that the call-note, being more or less the result of imitation, is influenced by sounds familiar to the bird, and of these the most pleasant are those resulting from or associated with the act of feeding or of obtaining food. The sounds produced by eating would probably seem loud to the birds making them, just as with us the noise made by masticating dry toast is more noticeable to the eater of it than to his neighbour at table. In the course of time persistent sounds might, in consequence of the involuntary or voluntary imitativeness of a bird, modify its call-note, in the same way as they have undoubtedly affected the character of the song of at least one individual wild song-bird subsequently mentioned. It is also possible that a resemblance of the sounds made in obtaining food, and for the purpose of suggesting those sounds to other birds; but often there is certainly, from whatever cause arising, a great similarity between the call-notes of birds and the sounds which are occasioned by their obtaining food or eating it. Instances of this may be found in the hawks, whose call-notes are screams, like those of their victims; in the common butcher-bird, which has a note resembling the distress-cry of the frog, on which it preys; in the blackbird and thrush, which at times makes a clicking sound that is the foundation of the reiterated alarm-notes of the former bird.

Among birds, as among men, leisure is necessary to the development of song, and may to some extent induce it. The cause of the frequent imitativeness of captive birds may perhaps be found in their security and idleness. It is not contended that leisure would make a bird of harsh voice musical; but no one will dispute that if a song-bird be constantly harassed it will not sing. The constant employment of the brain in detecting and avoiding danger, or in the occupation of getting food, hinders any tendency to develop song. It is possible that want of leisure, and a feeling of insecurity, may have prevented the elaboration of song among birds of torrid regions, where they are continually pursued by enemies, engaged in battle among themselves, or are labouring to obtain food, and where their increase is checked by violence rather than by the climatic influences that in temperate zones periodically lessen their numbers. If the suggestion that leisure is necessary to song be correct, we should find limited voices in birds that are much occupied either in obtaining food or avoiding enemies. Such is the fact. Of the former class are the *Raptors* and *Picidae*, of the latter the *Rasores*. The *Anatida* may belong to both.

The author says he has made a large number of records of song in the Stroud district. The tables show that the thrushes (about 50) sang 1,120 phrases, each of which comprised one or more notes resembling the sounds made by other species, and 450 other phrases that had not a like retabulated similarity. The redbreasts (about 65) sang 1,316 phrases, 905 of which were recognized as containing an imitation, and the larks (about 31) sang 345 phrases. From his observations, he contends that bird-song originated in a cry produced by bodily contortion. This cry was developed by use in times of danger. It then became a warning note that was elaborated into a call-

note. This note was repeated by males in varied tone and pitch, and several influences ten led to make it a reproduction of surrounding persistent sounds. The call-notes were repeated by the males to the females; and in this manner arbitrary phrases were constructed. Further efforts on the part of the males induced greater variety, which took the form of imitation of other sounds.

The Bell of Justice.

Comes o'er the sea from Italy
A story quaintly sweet:
Nor minstrel's tale of lovers frail
Nor jousts where brawlers meet.
No lute-swept air to beauty faire,
That bard or harper sings,
Doth sweeter chime; to scented thyme
No richer fragrance clings.

To guide the State, a kindly fate
A noble prince had crowned
Italy's king, while liegemen sing
His praise the champaign round.
In all things just, in sooth, needs must
That vassals homage pay.
Where Love doth reign, no galling chain
Constrains his gentle sway.

Through Italy the King's decree
By heralds blazoned wide:
"Twixt man and man," the mandate ran,
"Let Justice always bide,
Nor fear that I, when any cry.
For succour at my hand,
Shall close mine ear, nor deign to hear
The humblest in my land."

"Here in yon tower, my kingly power
Decreases a bell shall swing;
The meanest one may hither run
And loud for Justice ring.
When grasping might shall claim as right
What Justice ne'er allows,
Nor fear that he shall spurned be,
Nor we his cause espouse!"

Such role benign, like mellow wine,
All heart's warmed through the land,
And, man to man, each warring clan
As banded brothers stand.
The Justice-bell ne'er pealed its knell;
The frayed rope useless hung:
A creeping vine doth, braiding, twine
The rotting strands among.

When, lo! one morn, a sound was borne
Across the busy mart,
And, as the knell of passing bell,
It pierced the city's heart.
The long-hushed clang like clarion rang
Amid the echoing walls;
The elbowing crowd demand full loud
Who thus for Justice calls!

The King and Court, with hurried port,
Assemble in the square.
"Who thus doth ring? The plaintiff bring!
Deny his claim who dare!"
No answering sound, while far around
The bell's loud clangour tolls:
And awe-struck, dumb, the rabble come
As breaking tide-wave rolls.

"I' faith, perdy, a mystery!
Ho! varlets search the place
And hither bring who'er doth ring
And crave our royal grace?"
The minions sped, with hasty tread,
And, hurrying through the crowd,
Urged on his course a worn, lean horse,
Mid laughter long and loud.

The poor, starved beast, that fain would feast
Upon the tender vine
That tempting hung, the bell had rung!
And Justice owned the sign.
"Now by my crown!" with haughty frown,
The King cried lustily,
"The brute doth pray for help to-day,
Nor pleads in vain to me!"

"Let no one stir: bring forth the cur
That left yon beast to die!—
Now, sirrah! see with my decree
You hasten to comply!
Thy faithful friend thou'lt kindly tend,
Serve him as he served thee;
Shalt house and feed thy toil-worn steed
Till death shall set him free!"

With cheeks aflame, and tears of shame,
The catiff meekly swore
To keep the trust, and owned it just.
Then with a lusty roar
The crowds divide on either side,
For horse and man make way;
Loud plaudits ring: "Long live the King
Who justly rules this day!"

Montreal.

SAMUEL M. BAYLIS.

Early Colonization in Canada.

It may be said that the healthy social life and industrial progress of the Canadian people were due, in the main, to qualities which the founders of families brought with them from their homes in Northern France, developed and fructified by the discipline of the climate and the example and ministrations of a devoted clergy. Interesting it is to follow step by step the career of Champlain and the colony under him, and to share in the enthusiasm of Chomedy de Maisonneuve and his pious company, as with holy rites they laid the foundations of Ville Marie. Rapid, indeed, under those brave explorers of the 17th century, was the march of conquest. Once the foundations of the colony were fairly laid, they shrank from no difficulty, no danger. Missionary zeal, ambition, commercial enterprise, enlightened curiosity and love of adventure, all combined to make their successes rarely paralleled in boldness, range and usefulness. In less than a generation from the establishment of the first pioneer (Louis Hébert, 1617), that is, in the year 1645, we find, on the authority of M. Sulte, that the progress of colonization is represented by 122 *habitants* or settlers, all of whom but three are married, while one of the three is a widower. We know their names and places of birth. Thirty-four of them came from Normandy, twenty-seven from Perche, four from Beauce, three from Picardy, five from Paris, three from Maine. Of the whole number eighty were from north of the Loire. As to the wives, it is probable that the eighty north-country men were balanced by eighty north-country women, the families that supplied the former also supplying the latter. Eight years later, that is in 1653, M. Sulte reckons the settled population at 675 souls, of whom 400 were at Quebec, 175 at Three Rivers and 100 at Montreal. Among the founders of Canadian families may be mentioned Louis Hébert, Guillaume Couillard, Abraham Martin (Mgr. Taché and Dr. Taché are descended from all three of these brave pioneers), Jean Côté, Pierre Paradis, Bertrand Fafard dit Laframboise, Christophe Crevier (ancestor of Ludger Duvernay, founder of the *Minerve* and of the Societé Saint-Jean-Baptiste), Pierre Boucher (ancestor of the de Boucherville family), the three Godefroys, Guillaume Couture (ancestors of Bishops Turgeon and Bourget), Joseph Gravelle, Toussaint Toupin (ancestor of Charles de Langlade), Charles LeMoine (ancestor of the most distinguished families and personages in the colony), Jacques Archambault, Gabriel Ducloux de Celles (ancestor of M. A. D. de Celles), Guillaume Pepin dit Tranche-Montagne (from whom have descended several men of mark, including Sir Hector and Bishop Langevin). There was also a floating population, consisting of fur-traders and speculators, soldiers, military officers and members of the civil service.

After 1658 the provinces south of the Loire began to contribute a considerable proportion to the population, while the immigration from Perche and Normandy declined. But, as M. Sulte points out, the first arrivals exercised a deep and lasting influence on the character and usages of the people.* A patriotic sentiment had gradually taken root, as a new generation grew up. The born Canadians looked upon Canada with the same affection that their fathers had felt for France. Some old usages were preserved, but they, as well as the songs that were brought from across the Atlantic and even the spoken tongue were somewhat modified in the course of years. The French Canadian was being developed.

J. R.

*In his *Histoire de la Littérature Canadienne*, M. Lareau (whose death at a comparatively early age was a grave loss to Canadian letters) lays stress upon the fact that the traditions, songs, tales, proverbs and superstitions of the French Canadians are all Norman or Breton.

The Song "Scots Wha Hae."

Recently, at a meeting of the Town Council of Edinburgh, the Lord Provost said that at present there was for sale the original manuscript of "Scots Wha Hae," and it was in danger of going away out of the country, but the Council could purchase it for £70, and he thought it would be a great pity that it should be lost to Edinburgh. It would be a great shame that the great war song of Scotland should pass to other lands, and he moved, therefore, that the Council should authorize the purchase of the song. Councillor Auldjo Jamieson said he thought it was just that it should be known that that monument of history had been purchased by a Scotchman (Mr. Kennedy, banker, New York), who desired that, before removing it to America and placing it in a museum there, the metropolis of Scotland should have the opportunity of purchasing it at the money he paid for it himself. The Lord Provost said he thought they were extremely indebted to that gentleman. It was then agreed to purchase the song.

A Relic of Browning.

Browning was at dinner at the house of a friend when he saw a phonograph for the first time. He was greatly interested in it, and started to repeat to it "The Ride from Ghent to Aix." When half through he stopped suddenly and exclaimed, "Good gracious! I've forgotten the rest!" The phonograph dutifully repeated all he had said, including the exclamation at the end, and the film upon which the poet's language was impressed is now preserved as a precious relic.