

A HERMIT THRUSH SONG.

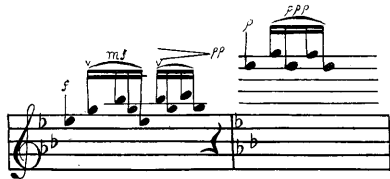
THEODORE CLARKE SMITH.

During the summer of 1902 I stayed from the twenty-fourth of June to the thirtieth of July at a camp on the shore of Lake Memphremagog. My tent was placed at the edge of a cedar and hemlock grove, mixed with occasional maples and birches which furnished nesting places for a great variety of birds. The most conspicuous singer was a hermit thrush whose nest was not far from the tent and whose song was heard every morning and evening and frequently during the day for over a month. Others of his kind were also audible, sometimes close at hand, but none became so thoroughly familiar as this "camp thrush." I have heard him at extremely close range, on one occasion from less than ten feet, and have also been able to distinguish his song, over the lake, from a distance of fully three-quarters of a mile. From an abundance of material the following notes are contributed in the effort to analyze his vocal performance :

In form the song of this thrush was very distinct, clear-cut and regular. His typical phrase was as here shown. This same form was repeated by the bird in higher keys, usually somewhat simplified by the omission of one or more of the latter notes until at the top of the bird's register it become reduced to



little more than the following. The closer one approached the thrush the greater appeared the regularity, as long, that is, as the bird was in full song, for when beginning or when singing softly he departed noticeably from his ordinary practice.



On several occasions the bird sang near the camp cabin in which there was a piano, and it was a simple matter, owing to the regularity of the song, to deter-

mine the pitch with considerable accuracy. With regard to the long opening notes I speak with great confidence for I took



down a long series on two occasions and found the pitch unchanged. From these observations I determined that the thrush used phrases in the following keys. I heard no others and never detected any

flattening or sharpening. It will be noticed that these keys form part of the scale of A flat major. In this, and in fact in the whole song, the approximation to the human scale was striking.

The hermit's song consisted, nine times out of ten, in a regular alternation of low with high phrases. Two in succession on or near the same level he never in my hearing gave, but he would sometimes ascend or descend through a series of three different keys. There was no fixed order nor any necessary key relation between successive phases. I have long lists of such and am certain that the bird uttered his theme in whatever key suited his fancy so long as it was not a repetition of the theme just uttered. For example, one series began with a low B flat followed by a high A flat, then a middle F, then an upper B flat, then dropped to low A flat, soared up two octaves to high A flat, dropped to middle B flat, then down to low E flat. This continual alteration of key was the most striking thing about the hermit's song, apart from its regularity and accuracy of pitch. It suggested somehow the orchestral handling of a theme by a musical composer, and made it beyond comparison more interesting as a performance than the simple repetitions of the olive backed thrush, or the endless variety of the thrasher.

The utterance of the theme was for all the lower forms distinct and without *portamento*. Now and then, although rarely, the bird gave his triplet or quadruplet notes a vibratory "trill," and in the very highest phrases the distinctness of vocalization was much diminished. The bird's voice never broke on its highest notes but his enunciation became somewhat indistinct, although never to such an extent as to disguise the form of his theme.

The voice of the hermit thrush was made individual by overtones giving it a considerable richness and penetration and even a metallic burr or buzz. It suggested somewhat the reed-quality of the oboe superadded to a flute's open tone. Direct comparison was possible only with the piano, a bugle and a flute, and needless to say, it was far closer to the last named, but very much more vibrant, less hollow. The "burr" was audible at short ranges only. At a hundred yards or less it blended to give the voice a singularly ringing metallic quality which gave it a carrying power unapproached by any other bird of that region. It

should be said that in proportion as the bird seemed to be exerting himself, as for example on one occasion when suddenly joined by his mate, the metallic overtones were less prominent, and in certain of the key varieties they were nearly absent. The long opening notes were the freest, the high, rapid ones the most burdened with overtones. At their worst the highest figures were occasionally almost squeaky but in the full song they were by no means lacking in sweetness, and they were always clear and sharp.

Heard from a very close range the long full notes were fairly piercing, so sweet, full, and vibrant were they. They were too loud for comfort, and when the bird suddenly began to sing while perched on a fence about ten feet from my tent it fairly made my ears ring.

The most characteristic feature of the song in the line of vocal modulation was as simple as the phrase itself, but equally effective. The opening long note was struck firmly and held sometimes with a slight crescendo, but the succeeding rapid figures were progressively diminished in loudness until the last clearly uttered notes faded away in a silvery tinkle. This *smorzando* or *diminuendo* utterance was almost habitual with the "camp thrush," and was indescribably effective. It suggested the modulation of the piano player since it surpassed in extent of diminution and in delicacy of utterance at the end anything within the compass of a wind instrument. But the piano *smorzando* would lack the crescendo on the opening note.

The whole song was vigorous and sure in delivery, slow—since the phrases, taking at the most two and a half seconds in delivery, were separated by four to six seconds of silence—but perfectly steady in tempo, and certain in execution. The unusual richness and vibrant power of the tone, enhanced by the effective *smorzando* utterances of successive phrases, with the never-failing alternation of key and pitch marked the song off from any other sound of the Canadian woods.

This bird was by no means unusual, nor on the contrary identical with others of his species. His nearest neighbor differed from him in several marked ways, being less regular in song form, having much more variety in his phrases, using minor as well as major keys, being less distinct and finished in utterance although rather sweeter in voice, singing a little more slowly and a little less loudly, being rather inferior in penetration, and not using the *smorzando* delivery so much. But both were master-singers.