

THE YEAR'S JEWELS.

BY M. C. GILLINGTON.

SAPPHIRE: APRIL.

Frees from enchantment, denotes repentance.

O, my lady's grief!
 Tears a-shine in eyes of blue,
 Trembling on their rim,
 As the bead of diamond dew,
 In an April dawning dim,
 Shakes on edge of leaf.

Smile again, sweet eyes!
 Let the brief and bitter shower
 Pass and be forgot,

Faster than through fern and flower,
 Arrowy-swift and lingering not,
 The last raindrop flies.

But as yonder blue
 Spread in sapphire sheen above,
 Pales with sudden cloud—
 By these tears I know my love
 Not alone a princess proud,
 But a woman too!

CLOUDLAND.



THE CUMULUS.

(From a photograph by Mr. B. Wyles, Southport.)

THROUGH all ages, and among all peoples, clouds, in their ever-changing shapes and movements, have always been objects of curiosity and keen interest; nay, the grandeur of their forms, and the ever-changing panorama of their movements, have invested them with a quasi-religious character, visible alike in the eastern and western mythologies.

That grand example of patience, Job, was asked: "Can any understand the spreadings of the clouds?"

Can anyone stand on the sea-shore, or on the deck of a vessel at sea, and watch, unmoved, the piled-up and ever-changing masses of snowy *cumulus* cloud on the horizon—here assuming grotesque forms, there stretching away into illimitable vistas, as if forming approaches to the "plains of Heaven," without wondering at the mysterious character of these glorious dissolving views?

Can anyone watch uninterested the delicate and feathery forms of the *cirrus* cloud, which every

moment changes, and assumes new beauties, apparently without an effort?

Can anyone gaze unmoved upon the dark and lowering *nimbus* as it approaches in solemn grandeur, its dark recesses lit up by fitful lightning flashes, and re-echoing the roll of distant thunder?

Can anyone watch the awful warfare of struggling clouds in the *cyclone*, when the might of Him who "maketh the clouds His chariot, and walketh upon the wings of the wind," is most manifestly shown in connection with the utter helplessness of man, and answer this question?

Or who, unmoved, can witness cloud phantasies like these? Did you notice the wonderful atmospheric effects that were visible at Madras last Thursday (July 18th, 1872)? I think I never saw anything more beautiful, or anything more life-like. For an hour or two the city, situated upon a flat plain, was surrounded by mountains as lofty, and scenery as grand as any that Switzerland or Scotland could boast of—some black and frowning, others snow-clad, whose

"Rocky summits, split and rent,
Formed turret, dome, and battlement;
Or seemed fantastically set
With cupola or minaret,
With crest or pagod ever decked,
Or mosque of Eastern architect."

Going towards this magnificent pile of cloud-mountains was like entering a pass; and, further on, the snow-clad peaks made me believe myself back in times long gone by, when, with alpenstock in hand, I crossed the Bernese Oberland, and looked up with eyes bedimmed with delight at the glorious Jungfrau.

Some years ago I was enabled, from Mussooree, to

make some observations as to the height of *cumulus* and *nimbus* clouds (under ordinary circumstances) above the earth. And to explain them, let me describe the surroundings. It is one of our favourite hill stations in the great Himalaya range, on the 78th parallel of E. longitude, and due north of Agra on the Jumna.

Its mall is 6,000, and its highest peak 7,026 feet above the sea. Below it, and 2,239 feet above the sea, is the wonderful valley of the Dehra Dūn, 3,761 feet below the mall. Of this lovely valley more anon.

No locality in the world can exhibit such a diverse congeries (if I may use the expression) of views as Mussooree. Stand on the mall, and look to the south; below you lies the vast expanse of the Dūn, revelling in cultivation, and bounded by the fossiliferous rampart of the Siwálik Hills, beyond which, stretching away to the south, and melting in the purple distance, are the plains of India.

Turning to the left, you see the holy Ganges emerging from its glacier-tipped rift in the mighty Himalayas, struggling across the Dūn, and bursting through the barrier of the Siwálik Hills at the sacred shrine of Hardwár, and thence commencing its long pilgrimage seawards.

Just below Hardwár its right bank is tapped by the huge Ganges Canal, a river in itself, 654 miles long, re-joining the parent stream at Cawnpur, after giving off 3,078 miles of distributaries. We distinctly see the canal, and Roorki, the headquarters of the Royal Engineers, with its enormous workshops on the left bank; and above it we see the canal carried across the Soláni river by an immense aqueduct.

Turning to our right, we see the Jumna, glacier-



THE CIRRHUS.

(From a photograph by Mr. E. Wyles, Southport.)



THE NIMBUS.

(From a photograph by Mr. B. Wyles, Southport.)

born like the Ganges, passing across the Dūn, through the Siwálik, and flowing away Delhiwards, to join the Ganges at Allahabad.

Let us climb one of the hill-tops above the mall, and, looking northwards, what a sight meets our enraptured gaze! Snow-clad peak on peak stretching away to the N.W. and S.E., and lost in the shimmering haze of their own exhalations; all giants,* varying from 24,000 to 26,000 feet in height; but the Titans, Kinchinjunga and Mount Everest, respectively 28,178 and 29,000 feet in height, are too far S.E. to be seen.

We can now revert to the subject of this paper, bearing in mind that the mall is 3,761 feet above the Dūn level. On two occasions I witnessed from it the following interesting sight. Below me stretched a vast expanse, as of purest flocculated cotton-wool, entirely obscuring the plain of the Dūn; above me, the pure cerulean. My sky was clear, that of the valley below was obscured by cumulo-stratus.

Aware of the chance that I now had, I looked about for landmarks whereby to measure the height, above the Dūn, of the stratum, and caught sight of a house, 500 feet below me, which was just touched by the woolly expanse, and, therefore, enveloped in fog.

The figures now were clear enough; I was 6,000 feet and the valley below me was 2,239 feet above the sea level, or 3,761 feet below me. But the strato-cumulus was, as regards its upper surface, 500 feet below me, and, therefore, 3,261 feet above the Dūn valley. But its thickness I could not estimate having no landmarks.

* When I returned to Scotland in 1878 I took my wife on a trip to the Highlands, and, steaming up Loch Lomond, I looked in vain for the Ben, and asking for its whereabouts, was told: "Eh, mon, yon's it afore ye!" I was abashed at this comparative hillock being the mountain I had climbed with such emulation as a boy.

On another occasion, in the Rains, I was watching the ever-changing panorama of the Dūn, and caught sight of three thunderstorms slowly passing up the valley from the S.E. (my left), and, apparently, two or three miles, perhaps more, apart. As they came up abreast of me it was most interesting to watch the warfare of these storm-clouds. The dark nimbus was triangular, the apex downwards, shading off into the vertical lines indicating rain, and illuminated now and then by lightning flashes.

The three storms were most business-like in their movements and actions, each seeming to assert its own dignity and importance; and I watched them with interest and amusement, for while I was in sunshine and under a cloudless sky, each village over which each nimbus passed had its "heaven black with clouds and wind and great rain."

The most remarkable fact regarding these vagrant nimbi was the constant fire of their artillery. One would fancy that their electric strength would have been exhausted soon after they left the far south-east where I first detected them; but, on the contrary, they acquired strength as they proceeded.

Now about the height of these nimbus clouds above the Dūn. As stated above, I was watching them from an elevation of 3,761 feet above the valley, which is bounded to the south by the Siwálik Hills rising to a height of 1,500 to 2,000 feet above the plain. I caught them passing a 1,500 feet peak, and they were below my line of vision (3,261 feet above the Dūn), say, 300 feet roughly, then each nimbus would be, say, 1,200 above the Dūn, the cumulo-stratus being 3,261.

The average altitude, therefore, of both phenomena would be 2,230 feet above the Dūn, or 4,469 feet above the sea.

R. F. H.