

gives off about 16 cubic feet of carbonic acid gas in 24 hours; 16 cubic feet of oxygen is absorbed by the lungs; it has been calculated that at least 3,000 cubic feet of fresh air should be supplied every hour for each person; the air would thus have to be changed every hour in a room containing 3,000 cubic feet of air. And in a room containing 1,500 cubic feet the air would have to be changed twice; and in one containing 1,000 cubic feet, three times. Now, experience proves that in a cold country it is impossible to change the air in a room more than three or four times in an hour without creating a perceptible draught, and therefore the room should contain, as I said before, at least 1,000 cubic feet of air for each person. In illness more air is required than in health, the sick person being entirely dependent on the air of the room for a supply of oxygen.

After each of the lectures we had some practical work to do in bandaging. We practised on each other and on two little boys especially engaged for that purpose. We perfected ourselves in roller bandaging, in bandaging the head, in bandaging each finger separately for a burn, in bandaging a broken jaw, leg, ankle, &c.; we also put on splints, securing them with bandages.

The next lecture was exceedingly interesting, and treated of fevers, teaching us to distinguish between typhoid and typhus, scarlet fever, measles, and small-pox, describing the course of a fever case, and giving that of small-pox as an illustration.

With regard to typhoid the lecturer spoke of the danger attendant on giving any other food than milk, not only during the disease, but for a long time afterwards during convalescence—the result of giving other food being often ulceration in the stomach, which may prove fatal.

The lecturer also gave some valuable hints on disinfectants, telling us which were the best to use for occupied and unoccupied rooms, for infected clothes, &c., and the necessary precautions to take to prevent the spread of infection. Before the next lecture he showed us some bottles of different disinfectants that he had brought down from London with him, and described their various uses.

The third lecture dealt with the nurse herself, with her dress, and with the precautions the nurse should take for her own health.

The lecturer gave directions for lifting helpless patients, for changing the sheets, upper and under, without moving the patient out of bed, and he gave minute directions about other details of nursing, such

as administering medicines, and the washing and dressing of patients.

In the fourth lecture a rigor was described, which most people have experienced who have had many illnesses, and which is the premonitory symptom of all inflammations and fevers. A rigor consists of a severe shivering fit, generally followed by heat; in some cases the rigors are frequent.

The class was much interested in the remarks of the lecturer on the treatment of children, and on the signs that they give of different diseases. Thus, for instance, drawing in the thumb tightly across the palm of the hand is a warning of convulsions, and a shrill crowing noise is a sign of croup.

Children who are too young to say where the pain is should be carefully watched, and any symptoms of disease should be carefully attended to.

This lecture was a most interesting one, treating of some most important subjects, such as delirium, baths, bed-sores, how to distinguish pain, &c.

In the last lecture local applications formed the subject of the lesson; we were taught the proper way to apply a blister, poultices, leeches, fomentations, and the padding of splints. A poultice is a thing that is constantly required, but how few comparatively know how to make it properly!

To do this a basin should first be scalded, or warmed by the fire, and then sufficient boiling water having been put into it, the linseed should be added, stirring it to a proper thickness. The poultice should be made thick to keep the heat in, and spread on a piece of flannel, cotton-wool, or muslin, which should be turned over the edges of the poultice, the linseed being next the skin.

After the lectures were over, the nursing course was followed by an examination, partly written and partly oral. We had first of all to write out the answers to five or six questions on paper, and we then had a *vivâ voce* and practical examination in bandaging. Pupils who obtain the two certificates of the first and second courses are again eligible for re-examination, when they become entitled to a voucher, and a medal if they like to purchase one. Candidates can be re-examined by a local doctor, when they receive a voucher testifying to the effect that they have passed.

The questions we had at the third examination were partly on the surgical course and partly on the nursing. The vouchers we received were small cards, about half the size of the other certificates, signed by the local secretary.

LIFE IN OLD VIRGINIA.

IT is May—only May—yet as I sit in the innermost recesses of the large drawing-room I am glad enough to be sheltered from the noonday heat and glare. The blinds are closed—alas, for the sad necessity!—to keep out the housewife's enemies, the flies; but through the carelessly arranged

slats much of the prospect without is to be seen—too much, perhaps, for the expedition of my writing.

Through a gap in the orchard rise the twin mountains—the last of the range—painted a pale summer blue upon the still more misty blue of the distant sky. On the topmost twig of a peach-tree just beyond the

yard-fence a redbird, glorying in his own magnificence, is shouting his love-song, in strains to us somewhat discordant, but to him the perfection of harmony. Another, with uplifted crest and ruffled plumes, hurls defiance from a neighbouring stump, and every now and again a rush of dazzling wings scatters the blossoms from the apple-boughs. From the pasture-land in the valley comes the whirr of the grass-cutter, with its attendant sounds; bluebirds are chattering in the leafy chestnuts, "Bob White" calls from the waving wheat in the orchard, and in the wooden porches the sparrows* are pattering about, only momentarily discomfited by the futile snapping of the big dogs at the flies. Not far away the woods, too, are alive with feathered creatures—blue, scarlet, and golden—darting from tree to tree, or cleaving the upper air like flames of fire. Flowers, as radiant as they are scentless, strew the bare earth or break into blossom on the branches overhead. Butterflies of a size and splendour unknown in England cluster about the creeks to drink, or hover, very flowers themselves, above the crystal water.

Capricious as spring is with us, as elsewhere, when once it has fairly set in that person must be insensible indeed who does not revel in its all too brief beauty. The mere delight of beholding so much verdure is in itself almost enough for eyes weary of the red uplands—sparsely covered even at midsummer with faded grass which disappeared altogether with the first advance of winter. Now everything is young and fresh once more. Yet somehow a longing at first hardly understood steals over one—a longing for the more humble English spring, with its sweet, woody odours, its fern and flower-fringed lanes, its sober-hued birds pouring out melodious rhapsody. Here we have no lanes. The roads are bare and uninviting, and flanked on either side by straggling fences, not in "picturesque disorder," but simply ugly and untidy. To ears accustomed to the prolonged notes of the English songsters the Virginian birds are indeed but "awkward chirrupers," and when the burning days come upon us, as they will do very soon, even these broken songs will cease.

But stay! How can I forget that prince of song, the mocking-bird! Yonder he sits, the daring fellow, high up on the pear-tree above the oriole's nest, hardly ten feet from the window. Up and down he goes, trying every note in the scale—now sweet and melting, now in loud pæans of triumph, always in reckless profusion—anon breaking off to hold up his less accomplished neighbours to scorn. It is well for my letter that the beguiling mocker does not linger long, but swoops off to pastures new, a white gleam flashing from his pen-feathers as he spreads his strong brown wings in flight.

I have spoken of our spring as being capricious, yet of what season may not the same be said in this boasted clime—except perhaps the summer? Vain and delusive are most theories, and especially theories about climates. Here have I been living for five or six years in one of the Southern States of the Union, and

yet when asked the perennial question, "What sort of a climate have you in Virginia?" I am utterly at a loss for a coherent reply.

The English traveller, in whatever section of the States he may chance to be, must be prepared for all kinds of climatic surprises. He is accustomed, as we all know, to a variable climate, but not to violent extremes—such as, let us say, a rise or fall of the thermometer to the extent of thirty or even forty degrees in the twenty-four hours. And when the prospective settler in Virginia is duly informed that that State enjoys an "equable and temperate climate," he must remember that the sentence should conclude thus:—"as compared with some other sections of the States." He will find, even in Virginia, extremes of heat and cold which to English ideas seem very extreme; and the Virginians themselves, when not talking for a purpose, will tell him that he must not expect to find a paradise as to climate—he must not look for perfection, but must take the good and the bad together here as in less favoured latitudes.

Memory, aided by a "weather-diary" which was itself kept in order by a registering thermometer, tells me strange—nay, startling—tales: of days when that thermometer never went lower than 90° in a cool (?) and shady porch from 5 a.m. to 7.30 p.m.; of another when it stood at 113°—in the *shade*, of course; of more than one winter day when it marked 10° below zero. I need not add that I was eagerly assured that these were exceptional seasons, and no doubt they were; but still they betrayed hitherto unsuspected capacities on the part of the climate of Virginia.

Again, the month of November has found me alternating between furs and muslins, suiting my change of raiment to the light-hearted vagaries of the weather; a certain first week of April—so oppressive that even the most sheltered of porches was not bearable until evening—was followed by eight degrees of frost; and January has witnessed us gazing sadly upon a thermometer which, in only partial sunshine, was slowly but surely mounting to 80°. Our Virginian winters assuredly cannot be accused of monotony. They treat us to a little of all kinds—"everything by turns and nothing long." Hot weather, cold weather, summer sunshine, deluges of rain—the like of which are undreamed of in our native isle—followed by a cutting wind which petrifies the drowned earth, hangs up icicles in every available spot, and makes the roads look like the suddenly frozen waves of a turbulent sea.

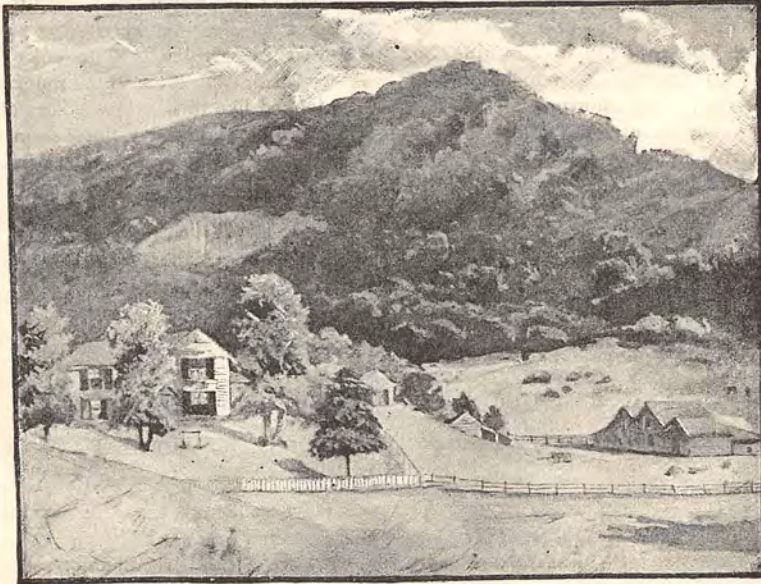
And these roads in winter! Bad enough at all times, they are for most of this season impassable, unless for heavy farm vehicles or exceptionally well-built spring-wagons. Now it is that we are able to prove beyond a doubt that our light American wheels are strong as well as sightly, and that they can stand an amount of rough usage such as their hideous and clumsy English counterparts could not by any possibility endure. On the roads, in their present condition, even riding is a matter of difficulty, walking beyond the confines of the yard-fence is out of the question, and domestic life begins to pall. There can never be any dreaming at ease in any carriage,

* A species of red-pole.

however well hung, upon the Virginian roads—or what we call roads, for the sake of calling them something. How much less so in winter, when they are axle-deep in mud or snow (probably both), varied by rocks, bottomless ruts and mud-holes—allowed to remain, we suppose, for the sake of lending interest—or, perchance, excitement—to the drive! It is along such highways as these that the farmer hauls his produce to market, and no arguments have, so far, had power to convince him that a little timely labour expended on the roads would be repaid tenfold by the eventual saving in vehicles, draught animals, and labour generally. There are, of course, “road-laws”;

mean coolness? No. Such follies as that of sitting in the garden, except on cloudy days—days which are hailed with a rapture which speaks volumes in itself—or of leaving our blinds open so that the heated air may enter and the flies disport themselves in our house, are abandoned to the stranger. And neither does he (or she) long indulge in them. The most British of the Britishers is fain, finally, to confess that there may be good reasons for customs to which he is unaccustomed.

Perhaps it is rather the length than the actual heat of a hot summer in Virginia which is found trying by some constitutions, native and foreign alike. When



AN ENGLISHMAN'S HOME IN VIRGINIA.

but the laws are either ill-kept or the work is ill-done. Anyhow, the results leave everything to be desired.

The changing days of winter are more favourable to our grand mountain scenery than are those of summer. The fine wooded heights take on in swift transition the most exquisite shades of brown and blue beneath the clear-washed sky or the trailing shadows of the sombre winter clouds. Indescribably gorgeous as are the fall tints, there is something yet more satisfying to some lovers of colour in the rich and varying hues of our December and January days.

Out of the six summers I have spent here, I have known two pleasant and fairly cool ones; yet even these two would have been considered distinctly hot by some English people, though not by those who, like myself, have never felt too warm in England. The four remaining summers were, I was informed, exceptions to the general rule.

An English person's idea of summer is of lazy sunshiny hours spent in the open air. But with us all this is changed. Shall we forsake our comparatively cool and semi-dark apartments in order to be baked out of doors, where even shade does not

people at the North are being invigorated by glorious fall weather in which the mere sensation of living is a delight, we are still looking fallow and dried up, and feeling exhausted by the apparent endlessness of the “heated term,” extending, as it occasionally does, far into October, or even November, and thus cheating us out of our fall. Without punkahs or trained servants, or in a frame-house, the very walls and furniture of which are hot to the touch, summer may become tedious. We have what is politely called “the mountain breeze,” and often we wish we had it not. It is a scorching blast which disheartens all nature, except the flies. The flowers droop and fade before it; the whole earth parches. We are liable, during the summer months, to more or less lengthy droughts, broken only by terrific storms; and then the lack of broad streams and lakes, and the presence of those interminable fields of scrub-grass, can scarcely be atoned for even by the beauty of the mountains, so barren and thirsty does the land appear.

Never shall I forget going North towards the close of one universally dry summer, and my first

sight of the Northern ranges—the White, the Green, and the stern Adirondacks—their feet clothed in living verdure, the brilliant meadows in the valleys dotted with neat and home-like farms, in marked contrast to the straggling untidiness of the Virginia homestead.

With us the nights are said to be cool. Would that I could endorse that opinion wholesale! But there remain bitter memories of nights hardly more refreshing than days—of friends driven to sling hammocks in porches—of open doors and windows which failed to relieve the stifling atmosphere within. Happily, however, we do not always suffer thus.

The evening is our time for recreation, when everybody's work is over. The Virginian housewife, whose domestic machinery does *not* "run like clock-work," and whose existence consequently is anything but easeful, is too wise to tire herself out before the labours of the day begin. The shortness of the twilight is against protracted excursions, unless there is a moon, but we contrive to make the best use of the brief Blind Man's Holiday allotted us. When the houses are near together—as, in the country, is only

the case on the outskirts of a village—neighbours wander backwards and forwards, and sit in one another's porches, and enjoy themselves in a cheerful and informal manner. On moonlight evenings, buggies and riders turn up from a distance, and the simple supper—with its coffee and iced tea, its warm rolls light as foam, its fruits and cakes, its possible stewed or fried oysters, and its inevitable ham—is shared by all without ceremony or special invitation. "We are always prepared for friends" might well be the Virginian motto.

Night it is not, this moonlight in Virginia, but a new and wondrous day. The mountains rise vaguely beautiful into the translucent sky; the stars are alive, and throb; the moon has a warmth of her own; the shadows fall clear-cut across the road, or upon grass which at this idealising hour looks fresh and velvety as any English lawn—but no English moonlight ever looked like this. The voices of the whip po' will and of the katydid have possession of the night, only overpowered at intervals by the fierce barking of dogs behind yard-fences, as the steady tramping of the horses' hoofs rouses one lone farm after the other.

EDITH M. NICHOLL.

JOHN FORD:

HIS FAULTS AND FOLLIES, AND WHAT CAME OF THEM.

By FRANK BARRETT, Author of "Honest Davie," "Hidden Gold" &c. &c

CHAPTER THE THIRTEENTH.



ASTONISHING as was the disclosure made to me by Mr. Leader, he had yet to reveal matter of still greater consequence.

"Now, sir," said he, after giving me time to mentally digest what I had heard, "what do you know concerning Anne, the wife of Benjamin Ford?"

"Scarcely anything. She died in

my infancy. My father—that is, Benjamin Ford—has avoided the subject: it revived painful memories. I was too young to take interest in a person I had no remembrance of at the time when she still dwelt in the remembrance of the village people."

"You know that she was strongly attached to Benjamin Ford, and he to her?"

"Yes."

"You know also, perhaps, that previous to her marriage she was in the service of Sir Andrew Armstrong's first wife?"

"I have heard that."

"Have you heard that after her marriage she nursed Sir Andrew's first son?"

"I have a faint recollection of something of the kind having been told me."

"You know that Mr. Harry Armitage is not the first son of Sir Andrew?"

"I must have heard a rumour to that effect at some time. The fact doesn't surprise me as it would if I heard it now for the first time."

"You don't know what became of his first son, then—what the popular belief concerning him is?—or, rather, was—for very few people in Kitford know anything about it now, my partner tells me."

"No."

"The belief is that through your mother's neglect the child was stolen from the house by hoppers. Such a belief as that might have obtained credence a hundred years ago, but no one in his sane senses could believe it now. As a general thing, hoppers have no cause to augment the numbers of their families in that way. They would be more likely to leave a child at Armstrong House than to take one from it. Still the hypothesis, unlikely as it was, had to be accepted. No trace whatever of the child could be found. Anne Ford told a plausible tale. She was known to be passionately attached to her mistress, and her honesty and worth were above suspicion. Her intense grief—resulting in brain fever, of which she shortly after died