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Title: Chambers's Journal of Popular Literature, Science, and Art, No. 696

Author: Various

Editor: Robert Chambers Editor: William Chambers

Release date: October 12, 2014 [EBook #47099]

Language: English

Credits: Produced by Susan Skinner and the Online Distributed

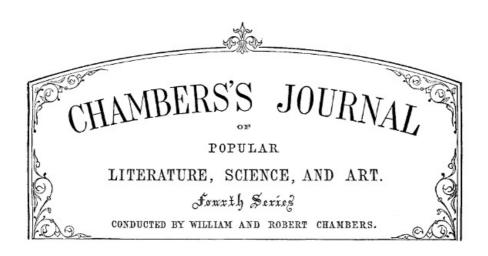
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CHAMBERS'S JOURNAL OF POPULAR LITERATURE, SCIENCE, AND ART.

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'MAKING PRETEND.'

LITTLE girls play at 'Making Pretend,' often assuming some such form as this: 'I'll be a lady, and you shall be my servant.' We all of us unconsciously imitate these little folks in many of the daily proceedings of life, not from a really dishonourable motive or wishing to wrong others. 'The truth, the whole truth, and nothing but the truth' is a proper maxim for a witness in a court of justice, and a wholesome precept to be taught to all; but it is curious to watch among the highest and purest in the land, as among the lowest and most debased, how many are the obstacles to the absolute observance of this precept.

Court-life is full of anomalies in this direction. The 'Queen's Speech,' as we all know, is not the Queen's Speech; it is not written by Her Majesty, and for many years past has seldom been spoken by her. The prime-minister writes it, after conferring with his colleagues; the Lord Chancellor reads it, as one of three commissioners named for that special purpose. In earlier periods of our history, when the sovereign was his own prime-minister, and his officials were dismissed at his will and pleasure, his speech was really a speech; but now that the ministers are responsible for all the public proceedings of the Crown, the speech is a message, really theirs, although couched in the first person singular, and read from a written paper by other lips. Once now and then the present Queen has had to be furnished with lighted candles to enable her to read her own gracious speech on the afternoon of a foggy day! The Queen is loyally supposed to be present in every court of justice, near the colours of every regiment, and on the quarter-deck of every vessel belonging to the royal navy. To salute the colours during a march-past is to salute a symbol of sovereign power; and even on the darkest night, or when no human being sees him, a naval officer touches his cap when stepping up to the quarter-deck. It is not telling a little fib, but acting one; 'making pretend,' for a purpose sanctioned by all and injurious to none.

The 'honourable member for ——' may not be distinguished for particularly honourable conduct as a member of society; but it is felt that the House of Commons must wink at this, and treat him like the rest. The 'most reverend prelate,' the 'reverend occupants of the spiritual bench,' the 'illustrious duke on the cross benches,' the 'noble marquis,' the 'noble and learned lord,' the 'honourable and gallant member for ——,' 'my right honourable friend'—all these are intended, not as mere flatteries, but to preserve decorum and courtesy in the proceedings of the two Houses. If members mentioned one another by name, or used the second person 'you,' unseemly wrangles would almost inevitably occur; a little 'making pretend,' even if involving a somewhat cumbrous form of circumlocution, is found useful here; many a foreign Chamber of Deputies or House of Representatives suffers sadly from the absence of some such rules.

'Your obedient servant;' this is a small fib; for generally speaking, you are neither his servant nor are you obedient to him. 'Truly yours' and 'Yours faithfully' are equally departures from strict verity; in all probability your correspondent has never done anything deserving of a gush of warm sentiment on your part. 'Yours always sincerely'—well, there may be a little earnestness here; but 'always' is more than you can honestly pledge yourself to. A fair lady is sometimes a little embarrassed in this matter. She may be under the necessity of writing to decline a tender offer made to her by a gentleman. How is she to address him? 'Yours respectfully,' or 'obediently,' or 'truly'—why, this is what he wishes her to be, but what she announces in the letter her refusal to be; and 'your obedient servant' is no better; for as she refuses to be his wife, she most certainly will not be his servant. Turn the matter about how we may, there is no apparent escape from 'making pretend,' unless the subscription to the letter be limited to the mere signature. But the 'making pretend' of respect or obedience is a small courtesy which lessens the probability of giving offence. And as with the subscription, so with the superscription; the word 'dear' is a fond and affectionate one; but how often do we really mean 'Dear sir' when we write those words? While we write the little word we may feel ourselves hypocrites for so doing, for reasons good and sufficient; but we must keep up 'dear' for form's sake. A young spendthrift heir writes to 'My dear father' for more supplies, and may yet be willing to see 'dear father' in the grave for the sake of the inheritance. The old man may suspect this all the way along, but still he addresses 'My dear Tom.'

'Mr So-and-so is not at home.' Certainly not true this, for you happened to catch a glimpse of his features over the parlour window-blind. Apart from any supposition that he owes you money which he is not prepared to pay, he may really have a good and sufficient reason for declining an interview with you. But this degree of 'making pretend' is a little too bad; 'Mr So-and-so declines to see you' would be true, but rather discourteous; and so perhaps a compromise is hit upon, 'Mr So-and-so is engaged at present.'

'Come and take pot-luck with us to-morrow—all in the rough, just as you find us;' not quite true, for preparations are purposely made for the reception of the visitor. 'Pray don't think of going,' you politely say; although as a fact it might be convenient to you and your family that your guest should go at once. 'Always glad to see you'—most assuredly 'making pretend,' for at best you only mean 'sometimes.' When a young lady at a party declares that she positively 'can't sing,' we take the assertion with several grains of allowance. When healths are drunk and thanks returned, we may do as we like about believing 'the proudest moment of my life;' and when, as sometimes happens at men's parties, 'He's a jolly good fellow' is sung after proposing the toast, it may happen to be that the person thus honoured is neither very jolly nor very good. All the little incidents of social intercourse, if examined critically, display somewhat similar indications of the widely diffused 'making pretend.'

We thank people or praise people in various ways, beyond our real meaning, from a sense of the

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value of civilities. The Lord Chancellor always assures the Recorder that Her Majesty very highly approves of the selection which her faithful citizens of London have made, when the Lord Mayor elect is presented; and the civic functionary, on that occasion, invites Her Majesty's judges to the Guildhall banquet, although the invitation card has been sent to each long before. 'I bow to your ludship's superior judgment;' although it may be known to both of them, and to the bench and the bar generally, that the counsel really possesses greater knowledge and ability than the judge. 'Gentlemen of the jury' are much flattered by counsel; penetration and sagacity are imputed to them in large measure; the advocate does not mean what he says, but he hopes to wheedle a verdict out of them, in duty to the client who employs and pays him. The judge, unspotted in his impartiality (an inestimable advantage which we enjoy in this country), has no temptation to indulge in such flatteries, and is free from embarrassment in the matter. As to a counsel positively stating his belief in the innocence of the prisoner he is defending, when he knows that the man is guilty, this is a stretch of audacity on which much has been written and said, and which leaves a painful impression on conscientious minds; a skilful counsel generally manages to avoid it, while using as much whitewash as he can for the accused, and applying plentiful blackwash to the witnesses for the prosecution. The 'enlightened and independent electors' of a borough do not believe that the candidate is altogether sincere in thus addressing them, while he himself has probably the means of knowing that they are neither enlightened nor independent; but the compliment is pleasing to their vanity, and perchance they give him a few extra cheers (or votes) as his reward.

'Making pretend,' in wholesale and retail trade, is now carried to such an extent as to be a serious evil. Where woollen goods are sold as 'all wool,' despite the shoddy and cotton which enter into their composition; where calico is laden with chalk in order to augment its weight; where professed flax and silk goods have a large percentage of cotton, and alpaca goods are made of wool which was never on the back of an alpaca—we are justified in doubting whether the fib comes within the range of allowable 'making pretend;' the articles may possibly be worth the price charged, but nevertheless they are put forth under false names. The law-courts tell us that there are some millers, 'rogues in grain,' who do not scruple to mix up with their corn a cheap substance known among them by the mysterious name of 'Jonathan.' Butter is sold of which seventy per cent is *not* butter. Tea, coffee, cocoa, and chicory are rendered cheap by adulterants. London beer and London gin (we will leave provincial towns to speak for themselves) are often terribly sophisticated, to give apparent strength by the addition of drugs little less than poisonous. The frauds of trade find their way into a greater and greater number of departments and branches. 'Cream of the valley gin,' the 'dew off Ben Nevis,' 'fine crusted port,' 'pure dinner sherry'—we might excuse a bit of exaggeration in the names, provided the liquids themselves were genuine. 'Solid gold chains,' made of an alloy containing only six ounces of real gold to eighteen of baser metal, are now displayed in glittering array in shop-windows; and many 'real gold' articles have only a thin film of gold to cover a substratum of cheap metal. Soon after the Abyssinian war, when some of King Theodore's golden trinkets were exhibited in England, Birmingham or London or both produced 'Abyssinian gold' chains, watches, and jewellery in which real gold was conspicuous by its absence. Following this precedent, the same or other makers introduced 'Ashanti' gold jewellery after the little war in which Sir Garnet Wolseley was engaged; and the auriferous quality of the one was about equal to that of the other.

But apart from actual roguery, other modes of attracting customers are noticeable for a kind of whimsical audacity. A hairdresser, who sells bear's grease, buys or rents a small bear, which he placards profusely, and writes up, 'Here, and at Archangel.' A furniture-dealer advertises, for twelve or eighteen months together, that he is enlarging his premises, and will sell off his stock at low prices, to prevent the articles from being injured by dust and dirt—his stock being quietly renewed from time to time, and the prices remaining pretty nearly the same as before. A draper covers half the front of his house with inscriptions relating to an alleged shipwreck or conflagration, to denote how very cheaply he can sell the salvage. 'Dreadful depression in trade,' 'bankrupt stock,' 'ruinous sacrifice,' are well-known manœuvres. We hear of 'Hampshire rabbits' that never saw Hampshire, and 'Newcastle salmon' that were certainly neither caught nor pickled at Newcastle; 'Cheshire cheese' made in other shires; 'Melton-Mowbray pies,' 'Bath buns,' and 'Banbury cakes' made in London—these we can understand as extensions in the production of certain articles at one time localised.

The artistic or fine-art world is much troubled with 'making pretend,' often involving white-lies of considerable magnitude. 'Old Roman coins' produced in an out-of-the-way workshop in London or Birmingham; 'Fine old china' fabricated within a recent period; a 'Genuine Rubens' that originated somewhere near Wardour Street; a 'Landscape after Claude' (very much after)—are sorrowfully known to purchasers endowed with more money than brains. At one of the Great Exhibitions, a French firm displayed two pearl necklaces, of which one was valued (if we remember rightly) at fifty-fold as much as the other, and yet none but a practised observer could discriminate between them. The exhibitor wished to shew, and did shew, how skilfully he could make mock-pearls imitate real—but what a temptation to 'making pretend!'

THE LAST OF THE HADDONS.

CHAPTER XX.-MRS TIPPER AT HOME.

The next morning I took care to find employment for Lilian which would require the use of her

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mind as well as her hands. Indeed we were all as busy as bees, there being a great deal still to be done in the way of putting our little home in order. Fortunately, as it happened for us, the builder had been obliged to make the rooms larger and less formal in shape than are the generality of cottage parlours, in order to carry out the architect's design for the exterior of the building, so we had two good sitting-rooms. Our drawing-room gave ample opportunity for the display of taste; and Mrs Tipper had begged me to select the furniture, choose the paper for the walls, and so forth. I did my best, in the way of endeavouring to make an effective background for the by no means few works of art which had arrived from Fairview, and were now to be unpacked and arranged by Lilian and me. Mrs Tipper had been a little disappointed at my selecting sober tints such as French gray for the walls, &c.; confessing that for her part she liked plenty of colour. Indeed the dear little woman too fondly remembered the best parlour in the little cottage at Holloway, where she informed me gay plumaged birds wandered up and down the walls amidst roses and tulips, to take kindly to more sober tints. And it required some diplomacy gracefully to decline two heavy lumps of china, supposed to represent Windsor Castle, which had been carefully preserved as relics of old times, and which were now brought forth from their beds of wool and presented as Mrs Tipper's contribution in the way of fine art for the drawing-room mantel-piece, with the information that they had been purchased at Greenwich fair and brought home as a surprise by 'John.' But I contrived to make it apparent that we already had as many ornaments as we knew what to do with; and the happy thought occurred to me to suggest that perhaps she would like to have the gifts which had been presented by her husband on the mantelpiece in her own room. At which she was fain to confess that such had been her desire. 'Only I thought you wanted a little more colour in the drawing-room, you know, dears; and I should be sorry to be selfish.'

But as our work progressed she acknowledged that the effect was 'elegant;' though I knew that term did not mean the highest eulogy in her estimation. The dainty collection of Sèvres and Dresden, which had belonged to Lilian's mother, the pictures, few valuable books, and the roses and lilies of the chintz, imparted quite colour enough to the room to satisfy us two. But it gave us enough to do to arrange it all. To the portrait of Lilian's mother, a really valuable painting, the costly work of a celebrated Academician (another extravagance of Mr Farrar's, deplored by Marian), was of course assigned the place of honour. She must have been a very lovely woman, of the delicate refined type of beauty, which expresses so much to certain minds, and the artist had evidently worked *con amore*. He had seen the soul beneath, and depicted what he had seen. I could well understand the thought which had suggested the simple white flowing dress and loosened hair, with no ornament save a star above the broad white brow, and which had caused him so to pose the figure as to impart the idea that it was floating upwards.

I have heard that Mr Farrar was not a little disappointed in the picture, considering the style too severe, and that he regretted not having stipulated for velvet and diamonds. But the picture had brought fresh fame to the artist; crowds of admirers gathering round the 'Morning Star,' as it was called, when it was on view at the Academy, though it was generally believed to be an ideal rather than a portrait. To Lilian it was a priceless treasure.

Mrs Tipper was in the outset a little afraid lest Lilian should do too much for her strength; but she presently took my hint and objected no more. I kept Lilian at work with me until we were both too fairly tired out to be able to indulge in any sentimental regrets. Two or three days passed thus, hammering and nailing in the mornings, chintz-cover making in the afternoons; in a steady, methodical, business-like fashion, until it was evident that very soon there would be nothing left for us to do, if Mrs Tipper and Becky remained firm in their determination not to allow us to give them any assistance in the everyday work of the house.

When our work was at length completed, we flattered ourselves that a prettier room than the cottage parlour was not to be found in all the country round. The pictures and china, Lilian's easel and pet books and birds, the pretty chintz furniture, and the rare flowers which found their way to us, did indeed form a very charming whole—a room which looked a great deal more like the home of a gentlewoman than did any of the rooms at Fairview; the latter being too gorgeous in the way of gilding and upholstery to be fitting receptacles for works of art.

I was not a little amused at Miss Farrar's very openly expressed astonishment, when, about a fortnight after our departure from Fairview, she found time for making the promised call upon us.

'Well!' she involuntarily exclaimed; 'you *have* made it look pretty!' presently adding—'for a cottage, you know. I am sure you need not mind any one coming to see you here. I shouldn't mind living here myself, I really shouldn't! I cannot think how you have contrived to make it look so *comy fo*!'

Then she a little curiously asked to be shewn the rest of the house. And although all our art treasures had been gathered together in this one room, she found that the other part of the house was well and prettily furnished; an air of comfort if not of luxury pervading every nook and corner; nothing being wanting from garret to cellar. In fact there had been no lack of means; Mrs Tipper had money enough and to spare for the furnishing, without drawing upon Lilian's two hundred and fifty pounds received for the piano. It had turned out there were some hundreds lying in Mrs Tipper's name at the banker's. She had not taken her brother's words so literally as he intended them to be taken; drawing barely sixty or seventy pounds a year of the two hundred which had been settled upon her; and consequently it had been left to accumulate; and as she smilingly explained, Mr Markham informed her there was quite a little fortune awaiting her. 'So I've been saving up a fortune without knowing it, you see, dears: it isn't everybody that does that.' Then, in a softer tone: 'Poor Jacob would be glad to know that his generosity to me will help

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his child.' Then seeing Lilian's colour rise as she looked up with tear-dimmed eyes at her mother's portrait, and perhaps perceiving something of the thought which occasioned the emotion, the dear little woman went on pleadingly and in a low voice: 'Sometimes I think that *her* love will plead for him. I am sure that his love and kindness to his sister will.'

Marian peeped in everywhere, and even found a gracious word for Becky, though I am sorry to say it was most ungraciously received. I do not wish to lower Becky in the eyes of my readers, and therefore I will only say that for a few moments she returned to the manners of *court-life*, in replying to Miss Farrar's gracious little speech.

'What a deal it must have cost!' again and again ejaculated Marian. 'And how hard you must have worked to get it to look like this!'

'It has amused us,' I smilingly replied.

'And a piano too!'

'Yes; that made its appearance yesterday; a present from an unknown friend;' adding a little mischievously, for in truth I more than guessed that friend to be Robert Wentworth: 'Was it a kind thought of yours, Miss Farrar?'

She was obliged to confess that it was not; though she did not omit to imply that she considered she had already done enough, and more than enough, in the way of 'kind thoughts.' Lilian's quiet self-contained bearing seemed not a little to astonish her. She had, I fancy, expected to find her in a lachrymose state. So at a loss was she to account for it, that she presently asked me in a whisper whether we had had a visit from Mr Trafford. I replied in the negative; and in her satisfaction she was so far off her guard as to say: 'Caroline said he hadn't been.' And she turned to Lilian again more gracious than ever.

She really meant to be kind, and looked disappointed as well as surprised at Lilian's persistent refusal to go to stay at Fairview, though she had had time to feel the difference between her former home and the cottage.

'But you really must not bury yourself in this small place; and it would be so nice for you, you know, having drives and all that. And there's your horse—I won't sell it, if you would like to ride again. I wish I wasn't so frightened of horses. Caroline says I should look splendid in a habit.'

'I should not care to ride now, thank you.'

'But you must come and stay. We are going to have all sorts of gaieties by-and-by; as soon as the new servants are in training. Caroline knows lots of great people; and we will have dinners, and balls, and fêtes, and all sorts of things. Of course you must come.'

'No; you are very kind—I am sure you mean to be kind—but I could not. I do not care for such things. I prefer the cottage and cottage-life,' gently but decidedly returned Lilian.

But that was quite beyond Marian's comprehension. She was convinced that there was some other cause for the refusal. It was impossible to really prefer living in a small cottage. After a few moments' reflection, she said: 'You are not annoyed about Caroline being with me, are you? You know you all left me alone, and'——

'Annoyed? No, indeed!' very decidedly replied Lilian. 'Why should I be?'

'Well, of course it's rather awkward your having broken it off with Mr—Trafford; Caroline says you have now, quite?' with a keen questioning glance. Lilian made no reply. She had indeed done nothing towards the 'breaking off,' only tacitly submitted to it. After waiting a few moments, and waiting in vain, Marian went on: 'But if you do not care about having him now, I don't see why you should object to meeting him occasionally. Indeed I do not know how I can forbid him to come to Fairview. There can be no objection to his coming to see his sister sometimes.'

'I do not see any,' quietly returned Lilian.

Whereat Marian looked very much relieved; and became so extremely gracious and affectionate towards us, that Mrs Tipper, who had not been much noticed of late, was taken into favour again.

'And I shall expect to see you too, aunt. I know you do not care for company; but you might come on the quiet days, when we are *quite* alone. I will let you know, the first leisure'——

'You must excuse me,' put in Mrs Tipper with gentle dignity; 'I have given up visiting. I may make an occasional call; but, like Lilian, I very much prefer my present humble home to Fairview—now.'

'It's very good of you to bear it so well, I'm sure; but you can't *really* prefer it, I think. Besides, you are my real aunt now, you know; and if you don't come it will look as if'——

'You must excuse me if I sometimes forget our relationship, Miss Marian' (never could Mrs Tipper be induced to give her the name of Farrar). 'My Lilian is the only niece I have known until very recently, and my love was all given to her long ago.'

But *one* thing had put Marian into a good-humour with herself and us, and she was not to be discountenanced. I think she good-naturedly made allowance for us, as disappointed and soured people, from whom a little ungraciousness might cheerfully be borne, by one so much more fortunate. So she took leave of us in the pleasantest way, and with a pretty wonder at our philosophy under difficulties; which proved that she had already become an apt pupil of Mrs Chichester's.

Aided by a natural self-complacency and obtuseness, and disturbed by no misgiving respecting

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her own powers, she would probably very soon become as perfect a specimen of fine-ladyhood as she could desire to be. The difference between a fine lady and a gentlewoman would never be perceived by Miss Farrar.

One return visit we decided that it was necessary to force ourselves to pay. We felt *that* much was only right and proper, if only to evince that we harboured no unkindliness towards the new mistress of Fairview. But it was not pleasant to anticipate; and in our desire to get it over, we were as prompt as Miss Farrar could desire in returning her call, setting forth for Fairview the next day. Could she have heard us comforting and sustaining each other by the way, she would probably have been less flattered.

We were admitted and ushered into the drawing-room by a strange servant in very gorgeous livery. It was to be a greater trial for poor Lilian than I had expected. I do not think that either of us had calculated upon the possibility of finding Arthur Trafford upon familiar terms at Fairview at so early a date as this after Lilian's departure. But there he was; and as Marian was singing at the top of her voice when we were ushered into the room, we had a momentary picture of them as they certainly would not have chosen us to see them; her eyes being raised to his, and his bent upon hers, with all the *empressement* of lovers, before they became conscious of our presence. Mrs Chichester was seated at a sufficient distance, near one of the open windows, apparently deeply immersed in the subject treated in a book she was reading.

'Good gracious!' ejaculated Marian, rising hastily from the music-stool as she caught sight of us.

Lilian shrank back a moment, and for that moment I contrived to screen her from observation. Fortunately the others were too much confused at being so discovered, to notice how we bore ourselves; and Lilian very quickly recovered herself again and advanced towards Marian. Presently we were all shaking hands and saying the right thing for the occasion.

Marian was extremely effusive about our goodness in coming 'so very *soon*;' partly, I fancied, to conceal a little embarrassment which she had the grace to feel. 'We did not expect you to be *quite* so good as *this*, you know, dear!' she ejaculated, kissing Lilian.

Arthur Trafford was the least at ease. When the rest of us had contrived to assume an everyday tone and manner, he seemed to be growing still more confused and conscious. It was certainly rather embarrassing, for a man so desirous as he of others' good opinion, to be found thus—assuming the attitude of a lover towards Marian Farrar, by the girl whom he had deserted; and so soon after that desertion. The motive was too palpable to be glossed over by any amount of sophistry. To add to his misery, he still loved the girl he had deserted.

The sight of Lilian's white face and grave eyes—the traces of the storm which had swept over her —was too much for him. He stood gazing at her with miserable yearning eyes; and when she presently addressed a few words to him with reference to a book of his to which Marian had drawn her attention, thanking him for the loan of it, and asking him to excuse her having in the hurry of leaving Fairview forgotten to return it, he could endure the torture no longer.

Hurriedly thrusting aside his sister, who had perceived something of what was going on in his mind, and was coming to the rescue, he went out of one of the windows opening to the ground, and we saw him striding down one of the garden paths, as though his only object was to get out of sight as quickly as possible.

Marian looked uneasy as well as annoyed; and watched Lilian more closely, not a little astonished, I think, at her self-possession. There was an awkward silence for a few moments; until Mrs Chichester came to the rescue, and steered us into the shallows again, making talk about nothing, in easy society fashion, until we had all recovered our equilibrium.

Dear little Mrs Tipper came out grandly again; no longer attempting anything in the way of company manners, they saw her as she was, a single-minded, true-hearted woman, with a great deal of natural dignity and self-respect. Utterly disregarding Marian's shocked looks and Mrs Chichester's half-suppressed smiles, she talked about her cottage home and new life with very unmistakable thankfulness for the change which had come about, so far as she was concerned. They had led to it by their compassionate tone, and they could not doubt the sincerity of her replies.

'You mean to be kind, no doubt, ma'am;' in reply to one of Mrs Chichester's polite little speeches. 'But I assure you that as for myself I am more happy and comfortable at the cottage than I have been for many a long day. I was not brought up like gentlefolks, and their ways never came easy to me. My father was a green-grocer, and a very good father he was—I am proud of my father, Mrs Chichester—and though he could not make his children like rich people's children, he taught us not to be ashamed of being what we were. If you don't like your station in life, get out of it as soon as you like; but don't be ashamed of it while you are in it. That is what father used to say; and there was not a tradesman in Camberwell more respected than father was. Jacob worked his way up in the world; but by the time he had got rich it was too late to make me any different.' Smiling at Mrs Chichester's graceful little protest, she cheerfully went on: 'We have none of us been brought up like gentlefolks; and we can't help its shewing. Why any one might see that Lilian is a lady, like her mother before her, and different from such as us, you know;' with a confidential nod towards Marian. 'I once thought that learning French and the piano would do it; but I know better now.'

Marian drew herself up with a few murmured words to the effect that the mistress of Fairview was quite equal to the position she found herself in. But it was of no avail. She was not a gentlewoman in Mrs Tipper's eyes; and Mrs Chichester herself was but a poor imitation of one.

'It is not, I think, usual to find—Camberwell so ready to recognise the claims of birth, Mrs Tipper,' said Mrs Chichester, with the extreme softness which generally accompanied such little speeches from her lips. 'Blue blood is not supposed to reign there.'

'I was not talking about blue blood, ma'am,' returned Mrs Tipper, complacently regarding her. 'Lilian's mother was a gentlewoman;' at which Marian, who had taken offence at Mrs Chichester's remark on her own account, gave it as her opinion that 'blue' blood was all nonsense, and she had never believed in it.

I sat silent, admiring the way in which Mrs Tipper and Lilian shewed their ability to hold their own. Mrs Chichester was inclined to be loftily condescending towards me; but as I met her with smiling cheerfulness, shewing no sign of being aware of my inferiority, the conversation soon languished between us.

Marian did her very best to be kind and conciliating towards Lilian. 'Now you have broken the ice, you will come very often, I hope, dear. It is rather a fatiguing walk up the hill; but there's the carriage always at your service. Of course you will let me send you back now;' going towards the bell as we rose to take leave. 'What I should do without a carriage I really don't know,' she added languidly.

We hurriedly declined the carriage, each very decidedly affirming a predilection for walking exercise; and finding that we were really in earnest, she reluctantly allowed us to depart as we came.

'There; it is over; and we need not go again for ever so long, I am thankful to say!' ejaculated Mrs Tipper with a sigh of relief as we turned homewards.

SEA-SHORE RAMBLES.

'Where are you going this year?' is a question that meets every one just now, and is suggestive of coming holidays, when the daily work, be it what it may, is put by for a season, and the tired brain is to be rested and refreshed by more or less change of scene and fresh air. 'Where are you going?' suggests to some perhaps the aspirations of an Alpine climber; to the angler, the joys of uninterrupted days of patient watching by the side or in the middle of a limpid stream in one of our home counties, or in the rougher and more exciting rivers of Scotland and Wales. The schoolboy thinks of long rambles in the fields and woods, or a cruise on the river; whilst Pater and Mater familias consider how best to give rosy cheeks and a month's delight to the little faces clustering round their table. It is chiefly this class of holiday-makers that we have in our minds whilst we cogitate the hints in these pages.

Not that the enjoyment of a sea-side ramble is by any means confined to the young of the household. Nothing is more refreshing to the breadwinner of a family than the perfect absence of restraint and sense of freedom which every well-chosen exodus to the sea-side should produce. Instead of the daily hurried breakfast and rush to catch the train or omnibus which takes him to his office or place of business, there is the leisurely and comfortable meal by the side of the open window, through which the sea-breezes waft, bringing health and vigour with them. The voices of children from the beach, full of life and joy, as they build their castles of sand and dig moats for the water to undermine them, are music to the ears usually half-deafened by the sound of cabs and wagons and the noise of crowded thoroughfares; and we do not wonder that there are many who, though they might go farther if they chose, prefer rather the perfect repose and pure seabreezes of one of our British sea-coast villages. Perhaps after a few days of this delicious sensation of rest and no hurry, the very want of occupation may pall on the spirit of an active man; and he may find that to sweep over the horizon with a telescope, to sail in a boat, to lounge or loll on a shingly beach, varied by trials of skill in throwing stones into the sea, cannot bear constant repetition without a suspicion of dullness, and that after all he wants something more to do.

The task we propose to ourselves is to suggest what can be done at the sea-side likely to interest and please those who, though not naturalists, are intelligent observers, and who believe in the old proverb, that 'Change of work is as good as play.' The young ones of the household soon become interested in fresh pursuits, and are eager to collect materials for an aquarium, or to commence a botanical collection; or perhaps to search for pebbles, shells, or fossils, if their quarters lie in some favourable position. We will suppose an intelligent mother and father who are not naturalists, who do not boast of any scientific letters after their name, and who belong to none of the learned societies of our land, who yet when at home read the current journals and literature of the day, occasionally attend lectures, and believe that the pursuit of science is interesting as well as useful. Perhaps they may have a medical friend or neighbour who is almost sure to possess a microscope, with which he not only is wont to make pathological investigations, but to interest and amuse his friends. He will often exhibit the circulation of sap in a fresh-water plant leaf, perhaps even the circulation of blood in a frog's foot; and many are the pretty objects afforded by the hairs of a leaf, the sections of a stem, or the wings of a beetle. But if by chance this same microscope be transported to the sea-side, with its proper arrangements for the examination of living organisms, the variety and charm to be derived from its use are endless. Almost every drop of sea-water teems with animal life; and an inch of sea-weed will produce tiny shells, animalcules, and curious forms under the microscope invisible to the naked eye. Then the very water brought from the sea and supplied fresh for the morning bath, or carried home by the

little ones in their tiny pails with such delight, half-filled with sea-weed, will often afford such marvels in the shape of zoophytes, or tiny jelly-fishes, as only those can imagine who can recollect their first sight of such wonders under the microscope.

It is very possible that the young ones of such a household as we imagine, are the first to excite inquiry as to the objects around them. They are sure to make friends in their sea-side rambles. The boys will be attracted by some gray-headed old gentleman who goes 'sugaring for moths;' or some crusty old geologist who pulls down the cliffs to get at some coveted fossil, or sits on the beach cracking flints to examine their formation, and delights to give a history of their growth to a youthful audience. The little girls of a family party will to a certainty bring home sea-weeds and sea-shore plants in their baskets, and delightedly take in anything they can learn about them. Father and mother begin to think that after all there is a great deal at the sea-side they do not understand, and ignorant as they are, it is not pleasant to confess it all to the youngsters; so a visit is paid to the bookseller for certain books of reputation, such as Gosse's *Year at the Shore*; and study begins in earnest.

After a while, the superior intelligence of the elders enables them to master many minor subjects of interest, and to put them in the position of instructors to the children, who are sure to follow them up with avidity. In a little time a sort of extempore aquarium is likely to be formed in the sitting-room or on the outside balcony, if there be one. We can see the row of soup-plates and piedishes which serve as domestic rock-pools for their inhabitants. Paterfamilias gets much interested in these, and is found to wait more patiently than usual for the brewing of his morning cup of tea whilst he examines the curious creatures thus imported into his presence. Poking up a sluggish sea-anemone, clearing off dead bits of sea-weed, or removing some unpleasant defunct mollusc, occupies these normally irritating intervals of time. After breakfast, whilst placidly enjoying the fragrant weed, so delicious to the smoker at the sea-side, the boys, who have often seen the fun, inaugurate a battle-royal between two hermit crabs, who, being the very cuckoos of the sea, spend their lives in the shells of other creatures, and have no rightful dwelling-place of their own. The scientific name of the hermit crab is Pagurus, but unlike other members of his class, he has only a portion of his body incased in armour. His hind-parts are soft, covered only by a delicate membrane; but his nature is warlike; and could he not by his own ingenuity supply the wrong done him by Nature, he would fare ill in this combative world; accordingly, he selects an empty shell of convenient size, into which he pops his tender tail, fastening on by hooks on each side, and having thus secured his rear, he scuttles over the sea-bed, a grotesque but philosophic marauder. The impossibility of Pagurus living long without a covering to his extremity is taken advantage of by young and fun-loving naturalists. Selecting two nearly of a size, and removing them from their appropriated shells, they are dropped into a vase of sea-water, and one of the shells, usually a whelk-shell, is placed between them, first breaking off the point of the shell. At once the skirmish begins. One makes direct for the shell, and having first poked in an inquiring claw and found all safe, slips in his tail, and fastening on by his hooks, scuttles away rejoicing. In the case we recall, he was not left long in undisturbed possession. His rival approached with strictly dishonourable intentions, and they both walked round and round the vase, eyeing each other with malignity. No exhibition ever produced more laughter than this amusing and after all, harmless combat, which lasted a full half-hour. The skirmish only terminated when another shell more perfect than the original one was thrown into the water, and the tender tail of the inhabitant poked, so as to make him vacate and enter the new abode, leaving the dilapidated shell to shelter his enemy, who made the best of it, curled up his tail, and reposed in peace after his fatiguing campaign.

In a very short time aquariums multiply, books are read, and excursions are organised to various rock-pools and silent sea-caves, where it is said curious creatures from the deep may be found and secured. We have already in former papers said much about the inhabitants of sea-water aquaria; but the variety that can be found and retained and studied in a temporary arrangement at the sea-coast is much greater than any collection which will bear transportation and town-life. At the sea-side, if one lovely anemone should sicken and fade, it can be removed at once, thrown back into its native element to have a chance of recovery, and its place easily supplied. Queer little fishes which lurk under stones will often live for a long time in a pan of water; and one we once kept in this way had individual habits and ways which were most amusing. After swimming about for some time in an inverted propagating glass resting in a flower-pot, he would sink to the bottom, and then curling his tail round him as a cat would do when making herself comfortable, he would look up with his unabashed eyes and pant away, as if fatigued with his gambols. It was in the evening we caught him, and he was then in full black—evening costume; but next morning we found him arrayed in an entire suit of light brown—cool morning-dress. In the afternoon he again assumed his black appearance.

An excellent plan in the country or the sea-side is to persuade and encourage the children of the household to keep a diary. Everything, however humble in the scale of creation, is worth observing and watching, and is worth recording for after-reference. The motions of a beetle or a butterfly; the flight or song of a bird; the burrowing habits of the mole; the evolutions of a shoal of porpoises; or the commotion betrayed by sea-birds when the herring appear, are each and all worthy a place in the observer's diary. For by such recordings have great works on natural history been given to the world. There are several hours in the heat of the day when to be on the beach or indeed out of shelter is impossible, and we have often found, it difficult to suggest employment for these hours at all consistent with the holiday spirit which pervades everything at the sea-side. Lessons are voted a nuisance and a bore; drying sea-weed and pressing plants found in the evening walks soon becomes tiring; but keeping a diary and chronicling the events of each day is something which seems to carry the interest of the holiday-time with it, and is pleasant to

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refer to afterwards. The capture of special sea-creatures, their habits and progress, perhaps their death, may be recorded, besides the names of other animals or plants seen or brought home. This, to be accurate, necessitates a little search in such books as may be handy; and the bodily rest so induced is often a great boon to the little folks, who fancy they never feel tired, but get hot and feverish sometimes through overdoing it. We have such a diary before us now, and the first entry is suggestive: 'August 10.—Last night the sea was all on fire; we were just going to bed when papa called out that we might go on to the beach with him; and there were lines of bright light all along the waves. We threw handfuls of pebbles in, and the light shot out brighter, almost like fire-works. Papa called it *phosphorescence*; and to-day we saw all about it under the microscope, and read about it in Mr Gosse's book. It turns out not to be fire at all, but a curious little jelly-fish, which makes this light. I ran with my pail and got some of the water where the light was; and this morning papa put it under the microscope, and we saw one of the tiny little jelly-fishes which made the brightness.'

Of course this appearance is not uncommon on a smooth sea in hot weather, and many have been the conjectures as to its cause. Our little naturalist is right in the main; but phosphorescence is not caused solely by the presence of one species of jelly-fish, but of various kinds of decaying organisms.

A little hand-net made of muslin slung over the side of a boat will often secure numbers of these lovely transparent creatures. 'A tiny beautiful glass-drop!' cries one of the baby naturalists as she looks at a perfect little *Beroe* floating in the sea-water drawn up in her little wooden pail. 'See!' says mamma, 'how the sunshine changes its colours, and how curiously it is fringed with tiny hairs, which keep moving to and fro.' Nothing can be more graceful than the movements of this beautiful little creature. A little crystal sphere, delicately striped, and marked with two long tentacles or filaments attached to it, which are in truth its fishing apparatus, and are fringed with slender fibres, which contract and expand apparently at will, seeking for the delicate morsels of food which support the life of this ethereal-like creature.

Then on our southern coasts, in the Isle of Wight and elsewhere, we have found other forms of Medusæ, even more charming. The pretty little *Turris neglecta* was constantly caught in the muslin-net one year. It is like a tiny crystal bell, with an elegant white fringe around it and a bright red coral bead in its centre. The *Sarsia prolifera*, so funnily described by that humorous and genial naturalist, the late Professor Edward Forbes, is a remarkable instance of the way in which the young ones bud or sprout off from the parent Medusa at certain seasons of the year.

When Professor Forbes wrote his book on the Medusæ, much remained to be worked out and discovered of their nature and organism. He threw out hints of their probable nature, which have been followed up by later naturalists; and no one would have rejoiced more than himself had he lived to see that his own conclusions were not final, but merely the beginning of discoveries which had to be carried on. The whole history of their development would form an interesting subject of thought and investigation for many a long day at the sea-side.

But in seeking for materials for the diaries of our young folks, much that is new and interesting is sure to turn up. One child devotes herself to sea-weeds. She brings them home in her little basket, floats them out in a saucer of fresh-water, and gently introduces half a sheet of note-paper underneath the spray of weed. Carefully lifting it up out of the water, the sea-weed displays itself gracefully on the white paper. If any of the little fronds are out of place, they are gently arranged by means of a camel-hair pencil brush. A bit of linen is laid over the sea-weed, and it is placed between sheets of botanical drying-paper under a press or heavy weight; next day the drying-paper is changed; and in a few days the sea-weed will have dried on its sheet of note-paper and become quite fast. The piece of linen must be carefully removed and the particular specimen named, if it can be identified.

In the diary of our little sea-weed collector we find written: 'In looking for sea-weeds to-day, I found a great many things which I thought were sea-weeds at first, and I tried to dry them in the same way. They were much thicker, however, and would not dry so easily; and I was told they were zoophytes or animals, and not plants or sea-weeds at all. One of them is quite fleshy, and is like a sponge, only very small. I find in Patterson's book that very likely it is really a sponge.' Well done! little naturalist; many an older and wiser head than yours has puzzled over the plant-like appearance of a zoophyte; and surely the history of a sponge from its first stage as a little gemmule to its death and decay in the interior of a flinty sepulchre formed by its own substance, would not be a wearisome lesson. Every department of science is so dependent on another, that no one can now claim to be a good geologist, or botanist, or anatomist who does not know at least something of the other branches of natural history. The rough sketch we have given of some of the occupations and pursuits which may add to the charm of a sea-side visit, is but suggestive of much that cannot be entered upon.

The botany of the sea-coast is special and peculiar, and will repay careful attention. Nowhere else do we see the lovely tamarisk trees forming bright green hedges with their pretty white flowers. The horn-poppy too (*Glaucum luteum*), with its sea-green leaves and brilliant yellow flower; the sea-holly (*Eryngium maritimum*) bristling and prickling even through a sea-shore boot; and on the slopes and sandy downs near the sea the beautiful *Convolvulus soldenella*, with its trailing stem and pretty pink flowers; the tiny sea-shore rose (*Rosa spinosissima*), the origin of all the garden varieties of Scotch roses, its stems often not rising more than a few inches from the sand in which it grows. Then there is the jointed and fleshy *Salicornia*, so characteristic of the sea-shore; and the aromatic samphire, only seen growing dangerously on almost inaccessible cliffs. Nowhere have we ever studied the names and habits of plants with the pleasure and enthusiasm we have at the sea-side; partly perhaps, owing to the holiday sensation that must always be

associated with the noise of the rushing waves over their shingly bed, in the minds of those who never hear it but when they have thrown work aside for a while. Memories never to be forgotten crowd into the heart at the sight of some well-remembered little plant, growing just where it did thirty years ago, when we were young and enthusiastic, and ready to learn all that we could of the beautiful world, which then seemed made for our delight.

If it ever were the case that the experience of one could be expected to guide others, we would say: Let your young folks read but little during their sea-side holiday; but observe much; write down what they see, and confirm and correct their observations by reference to any good recognised text-book, many of which are now published. The brain will thus get rest, or at least change of work, and will return to its ordinary duties with redoubled vigour and refreshment. The education of our children is now more than ever a puzzling question, and how best to teach them to use their hours of relaxation is involved in it. The naturalist spirit engendered, perhaps, by early rambles on the sea-shore is one to be preciously guarded and cultivated in future life; and those who have most carefully and wisely studied human nature and its tendencies agree as to its beneficial influence on the character.

The suggestions we have thrown together, imperfect as they are, may serve to shew that a seaside ramble may be made just what the seeker for pleasure chooses it shall be. For the schoolboy and philosopher alike, there is something to be studied and much to be wondered at and admired in every rock-pool, on every mountain-side.

SUNSHINE AND CLOUD.

IN TWO PARTS.

PART II.—CLOUD.

CHAPTER III.—TOO BAD OF MR SCAMPLIN.

Ten o'clock on the following morning found our party arrived at Dambourne station. It had been arranged that Angela and her brother should spend a long day with Isaac, and if nothing particular were found to be the matter, that he should return with them to town in the evening. On alighting from the train, they started off for Isaac's lodgings at Dambourne End, with the intention of looking at the cottages and garden-ground on their way. As they neared the entrance to the court in which Isaac's property was situated, Herbert could not but notice the sidelong glances which were bestowed upon them by the neighbouring inhabitants. He concluded they were caused by the presence of strangers. Isaac apparently did not observe them. But as the party proceeded up the court itself, the manifestations of interest in their presence became more striking. A group of children who were playing, scampered off at their approach, calling at the top of their voices: 'Ere him come.'

Herbert glanced inquiringly at Isaac, who was looking very complacent. Indeed he accepted this greeting as a sign of the welcome of his tenants on his return to them. As for Angela, she was too busily engaged in picking her way through the large amount of 'matter in the wrong place' with which the court was encumbered, to have much attention to spare for other purposes. For it must be confessed that although its owner had always been an assiduous landlord so far as the collection of rents was concerned, he had not been so assiduous in the improvement of the property either by disbursement, precept, or otherwise.

The children's shouts brought a number of slatternly women to their doors, and poor Isaac's complacency was somewhat rudely disturbed by one virago exclaiming: 'Well, you skinflint, are these some more agents come to look after your dirty cottages?' And by another following up with: 'Ah, you'll just have to dub up some of the money you've screwed out of us, ye ugly stingy thief!'

Isaac was thunder-struck. He had always been received by his tenants with civility, if not exactly with respect; and here was a position in which to be placed before his intended bride! But matters it seemed were not to stop here; for from every turning and from every door angry and bold-faced women emerged. And if things assumed a more hostile shape, as they appeared on the point of doing, the interior of the court would not be a good place from whence to beat a retreat; for if its owner was a Webb, this court was undoubtedly a labyrinth. So with that discretion which is the better part of valour, Isaac hastily muttering 'Let's get away from these blackguards,' fairly turned tail and fled. And not a minute too soon; for he carried away two splashes of mud upon his back, and Angela a portion of a pailful of soap-suds upon her bonnet, as souvenirs of their (soon to be) joint estate.

Without further adventure, Mrs Clappen's shop was reached; and as soon as that lady had got over her first shock of surprise at the sight of Angela, who she imagined was Mrs Webb, and whom she addressed accordingly, she proceeded to throw some light upon the cause of Isaac's reception by his tenantry. Some of them were customers of hers, and she had heard from them all the 'particularities,' as she called them—namely, that Mr Scamplin had very soon after his arrival paid a visit to the cottagers, had announced himself as Mr Webb's agent during his absence from home, and had shewn a paper purporting to be signed by that gentleman,

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authorising him to act as such; said he had received instructions to give notice that from that day week all the rents were to be raised; had diligently received the rents each week up to the very day before his disappearance, sympathising apparently with the tenants in what he called their harsh treatment by his employer, and in their inability to give immediate notice to quit, owing to the scarcity of cottages in the town; and had otherwise contrived that the onus of these hard measures should fall upon Isaac's devoted head.

An inspection of the box shewed that everything had been turned out of it and the cash removed, but that fortunately the title-deeds and other documents had been replaced. A consultation was held, and it was decided that Angela and her brother should return to town, and that Isaac should remain to set matters right with his tenants. Herbert advised that the robbery should be allowed to pass, since there was no clue as to Mr Scamplin's movements on his leaving the neighbourhood, and extra trouble and expense would be caused by communicating with the police. So in the evening Isaac accompanied his friends to the railway station, carefully choosing a route as distant as possible from the obnoxious court. After their departure, he called on his friend Mr Jones, and requested that gentleman to pay another visit to the tenants and explain to them the mistake that had been made. This, after some hesitation, Mr Jones consented to do.

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But Isaac's cup was not yet full. He had no sooner arrived at his lodgings than he received a visit from the sanitary officer, who pointed out to him some very necessary alterations and improvements which *must* be made in the court and without loss of time; and at Isaac's inquiry, estimating the probable cost at about a hundred pounds.

Poor Isaac! the cloud is rather heavy; but the sunlight of Angela and an income of six hundred a year and more expectations, is streaming behind it.

CHAPTER IV.—WEBB VICE ASHTON.

Isaac took no further notice of the robbery, and nothing more was heard of the thief. Mr Jones's attempts at pacification were tolerably successful, and the greater number of Isaac's tenants remained in their cottages on the old terms. At the end of three weeks, Herbert paid Isaac a visit, and received from him the five hundred pounds, for which he gave a receipt, which our hero deposited in his box.

Isaac had wondered several times about young Ashton, and whether Angela had seen or heard anything of him; so he asked Herbert about him.

'He left London,' he answered, 'immediately after he heard of Angela's engagement with you; and the ball we were going to was given up.'

'Poor young man!' exclaimed Isaac compassionately.

'Depend upon it he envies you your success,' said Herbert. 'And now what are you going to do with yourself all the time between this and the wedding?' he asked.

'I have these alterations in the court to see after; and I want to have matters straight for Jones, as I shall put the management of things in his hands when I go away for good. But get over your preparations as fast as you can, Herbert, for I shall be glad to be settled; and unless you want me for anything, I will stay here until I go up to London for the—the wedding.' Isaac brought the last word out with a jerk.

Herbert promised to make all possible haste, and said he would write to Isaac in the course of a week or so. This latter promise he fulfilled by sending Isaac word that he knew of a very desirable house at Brixton; but it could only be obtained by the purchase of the lease. He requested Isaac to let him know by return of post or the chance would be lost, and it was such a bargain. He had spent the greater part of the five hundred pounds on the furniture, which it was desirable to get into its place soon. Angela had been to see the house, and was delighted with it. To purchase the lease and fixtures, two hundred pounds more would be required, and if Isaac liked to close with the bargain, that day fortnight would be time enough for the money. While on the subject of money, he would ask Isaac to lend him a hundred pounds for Angela to make the necessary preparations for her marriage. This he asked on the strength of a remark that Isaac had once made as to his entire confidence in him.

Poor Isaac felt with many a twinge, that he was somehow getting involved. But he felt that it would be over soon, and that when he and Angela were married, and he was in possession of her jointure, he would make up for all this great expenditure by a little judicious saving; so he wrote to Herbert to strike the bargain, and said the three hundred pounds should be ready for him in a week or ten days.

When Herbert came for the money, his sister accompanied him. She told Isaac that it was such a delightful house, and that she was sure they would be so happy there. She also told him how deeply she appreciated his confidence in her brother and herself; and made on the whole so great an impression upon Isaac, that for once his heart was really touched. Before his visitors returned to town that evening, it was decided that that day month should be the happy one. On their way to the station the lovers were alone for a few minutes, when Isaac asked about having the banns published.

'Oh, I shouldn't like that a bit,' said Angela gaily. 'How should you like to hear me called spinster in church? No, no; Herbert must get a license; you need not bother about that.'

To Isaac it was a matter of so little moment, that what suited her suited him.

CHAPTER V.—WHERE IS THE LICENSE?

The time for the wedding sped quickly on. Mr Batfid's establishment was again visited, and Isaac received a suit of clothes that fitted him, their maker observed, 'like a gentleman.' Isaac received several charming letters from his betrothed. She seemed so happy in the anticipation of their approaching nuptials and their delightful home. It was arranged that the wedding should be a very quiet one. No one was to be present but the contracting parties themselves; Angela's brother and a young-lady friend; Mr Jones (Isaac's best-man); and the officials of the church. They were to spend their honeymoon in the isle much frequented by such visitations—that of Wight; and Angela wrote word that Herbert had engaged a respectable couple to take care of the house at Brixton until their return home.

A few days before the eventful one fixed for the ceremony, Isaac packed up what few things he wanted, bade good-bye to Mrs Clappen, told Mr Jones to be sure to meet him in good time at the church, and finally started off to his old lodgings—the coffee-house at Islington. The next morning he visited New West Road and accompanied Angela and her brother to Brixton. The house, as she had truly described it, was delightful, and it was, moreover, most charmingly and tastefully furnished. Isaac was surprised and pleased, though somewhat alarmed at the (to him) vastness and grandeur of his new residence. On their return, he spent the evening at New West Road, and was treated to some of Angela's songs and (as a special favour) a private view of the wedding-dress.

'There is one thing to be done, Isaac,' Herbert said, just as he was leaving; 'you have to put your name to the transfer of the lease of your house. However, that can be done when you come back here after the ceremony.'

Early on his wedding morning, Isaac was up and dressed. He could not indeed afford to be very late, for the ceremony was fixed for ten o'clock. At nine he suddenly remembered that he wanted a wedding-ring, so ran as fast as he could to the nearest jeweller's and bought one, the size of which he was obliged to chance. His ruling passion was strong even in these circumstances; for he contrived to beat the jeweller down a point in price, and made him promise to exchange the ring at any future time if it did not fit. He reached the church (which was close to Miss Faithful's residence) in good time, and found Herbert outside waiting to see him. Mr Jones was also in readiness, and the clergyman had just arrived in the vestry.

'I am glad you are come, Isaac,' said Herbert. 'I did not ask you about the license. I suppose you have it all right?'

'No; I haven't it,' answered Isaac.—'I understood that you would get it.'

'I? Why, surely you know that it must be obtained by one of the persons who are about to use it!'

Herbert was evidently vexed. 'Pray, have you only come here to make fools of us? I don't see what other interpretation is to be put on your conduct.'

'I am very sorry,' said poor Isaac meekly, 'but I didn't know about it. What can I do?'

'Do!' Herbert returned. 'The only thing you can do is for you and your friend to get a Hansom and go to Doctors' Commons as quickly as you can and get a license, and to be back here as much before twelve o'clock as possible. Meanwhile we will go back to the house and wait.'

So a cab was procured, and the bridegroom and his friend started off. Fortunately Jones had been to Doctors' Commons before, so that not much time was lost in its intricacies.

CHAPTER VI.—CHECKMATED.

On their return to the church the sexton was just about to lock the door, but seeing two gentlemen approaching, he waited till they came up; and not having seen them on their former visit there that morning, he politely asked them if they wanted to see the church.

'My friend has come here to be married,' said Jones. 'Where are the other members of the party?'

'Come to be married, has he? Who was he going to be married to?'

'Miss Angela Faithful,' said Jones.

'O come, that won't do, you know,' said the sexton, with a glance at Isaac's tall but ungainly figure; 'you're not going to gammon *me*. It's true she *was* married this morning, and a pretty young woman she is, and dressed very handsome too'—

'Yes,' Isaac broke in; 'and where did the money for it come from?'

'I didn't ask her, and she didn't tell me,' returned the man, half cross, yet half amused.

'You must have made some mistake, my friend,' said Jones. 'To whom was the young lady married?'

'I didn't hear his surname; but he was married in the name of Herbert.'

'That is her brother!' cried Isaac and Jones together.

'Ah, well; they're husband and wife too, now—a sort of double relationship, you see. But I can't wait here while you take your fun off me no longer,' the sexton continued. 'So here goes.' With that he locked the door and walked away.

'Stay!' cried Jones; 'we are not making fun of you; the matter is far too serious. Where can we

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find the clergyman who married them?'

'I can't tell you; he doesn't live hereabouts. He only took the duty for our gentleman, who is away for a few days. I believe his name is Smith; but I've never seen him before, and very likely shan't ever see him again.'

'Which way did the two go when they left the church?' Jones asked.

'I was inside, so didn't notice,' answered the sexton.

Isaac followed his friend down the church path, and seemed utterly bewildered. But now Jones appealed to him as to the probable destination of the pair. Isaac blankly suggested New West Road; so thither they went. Mrs Glubbs—Miss Faithful's care-taker—answered them. She knew nothing of Angela's movements, except that she understood she was gone to be married; to whom she did not know, but supposed it was to the young man she was always with—Mr Herbert. Could they see Miss Faithful? Yes; certainly, if they liked; but she would be able to give them no information; for she could scarcely speak now, and was well nigh idiotic.

The friends next proceeded to Brixton. A handsome phaeton was outside Isaac's house, and a gentleman—a stranger—was inside. He received them very urbanely, and just as though the place belonged to him.

Upon Jones asking him (for Isaac seemed as though he were in a dream) his business there, the gentleman politely returned him the same question.

'Sir,' said Jones, 'this is my friend's house: you are under some misconception.'

'Sir,' said the stranger politely, 'you are apparently labouring under the same difficulty. I bought this furniture as it stands, these fixtures, and the lease of this house, the day before yesterday, and am now legally in possession. Permit me, however, to remove any doubt by shewing you these papers. No—pardon me—not in your own hands: you can look over me.'

Yes; the documents were genuine enough; a proper lease and transfer, and all the rest of it; but no sign of the name of Isaac Webb. The stranger said the gentleman of whom he bought the lease, &c. was a Mr Herbert Ashton, whom he had not the pleasure of knowing personally; but the business had been properly conducted on both sides by respectable solicitors. He believed the last owner, Mr Ashton, had held the lease but a very short time.

The friends' next visit was to the police. They listened patiently to the tale, and calmly said they did not think much of it. Had the gentleman any witnesses or papers to prove it? No. Very well then; what could they, the police, do? The gentleman *might* be able to get a warrant; but if the story were true, the persons who had got the better of him would know how to keep out of the way of that; but it was a tale almost impossible to prove; and for their part they didn't believe a word of it. The gentleman looked as if he was insane. It may be remarked that Jones did not form a very high opinion of the penetration and intellectual capacity of the police in this matter. He next tried to persuade Isaac to go and consult a respectable solicitor; but at this he absolutely rebelled.

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'No, no,' he said; 'it will only cost me a lot more money.' At that word—so dear to him—he fairly broke down and sobbed aloud. A crowd began to form; so Jones hailed a cab, and bore Isaac off to the railway station *en route* for Dambourne.

CHAPTER THE LAST.—THE MORAL.

Isaac stayed with his friend Jones until he began to get over in some measure the shock he had experienced, when he resumed his old quarters with Mrs Clappen. After he had been settled there about a week, he saw in a newspaper the following announcement: 'On the 10th instant, Herbert Ashton, Esq. to Angela, fifth daughter of the late Vincent Faithful, Esq. of London. No cards.' This was supplemented at the end of another week by the receipt of the following letter:

DEAR MR WEBB-Possibly you may think that some sort of explanation is due to you from me. I must inform you then, that Herbert Ashton (whom you have known as Herbert Faithful) and I have been attached to each other for some years. The want of a little money as capital alone prevented our union. You remember, I daresay, our introduction at the Holloway ball. On that occasion the idea first came into my mind to play the part I have. It occurred to me as I listened to your conversation with Mr Hoppe, the Master of the Ceremonies, respecting me and my expectations. Thanks to you, they are certainly no worse now than they were then. I mentioned my idea to Herbert, and he has well helped me to carry it into effect. The shock to your self-conceit, pride, and cunning is no doubt severe, but time will assist you to get over it; and the lesson you have learned may perhaps be of value to you some day. Meanwhile endeavour to forget us. It will be idle to remember us; for we are—when this reaches you—far from the old country. We have left it and the old name in all probability for ever—unless indeed you should ever leave us the remainder of your property, in which case we might cross the seas to claim it. And if at any time chance should cause us to meet it will be but as strangers, for Herbert was careful to re-possess himself of all the receipts and documents, that could be of no use to us where they were. They are now destroyed. And do not trouble Miss Faithful with fruitless inquiries. She is not my aunt, but a distant relation of the same name as my father. Her property I may tell you goes at her death to her sister, Mrs Glubbs. We have met with Mr Scamplin, in whom my

husband recognised an old acquaintance. He is now with us, and desires to be remembered to you. If you ever think of your monetary loss—eight hundred pounds, was it not?—remember with pleasure that it has conduced to my happiness. I am aware that you intended it to do so, but in a slightly different way. And now, Mr Webb, good-bye for ever; and believe me that I shall never forget you. My dear husband desires his remembrances to you, and wishes me to say that he forgives you your rudeness to me at all times, as do I,

Yours never very truly, Angela Ashton.

AFFECTION IN BIRD-LIFE.

Any one who will watch carefully may soon perceive that not only pigeons in the court-yard, sparrows on the roof, crows and magpies in the wood, and many other birds, always live together in inseparable pairs; but also that swallows and various other small birds, when, in the autumn, they fly about in great swarms previous to migrating, always keep together affectionately in pairs. Starlings, crows, and various others, collect together in the evenings in large numbers on bushes, high trees, and church roofs for a night's rest; but in the morning the company resolves itself into pairs, and during the entire time of flight these pairs remain together. Several species are the exceptions to this rule, inasmuch as the two sexes form into separate companies to prosecute their migratory flight; this is the case with most of our summer warblers. The males start, and also probably return, some days earlier than the females; but whenever the two sexes have returned, they mate, and the pairs then formed are supposed to be of the same individuals as in previous years.

The fidelity and affectionate intimacy of married bird-life appears most conspicuously in pairs of the Grosbeak family and in small parrots. Here is perfect harmony of will and deed. The two sweethearts appear unwilling to leave one another's company for a moment all their life; they do everything together—eating and drinking, bathing and dressing of feathers, sleeping and waking. Various degrees of affection and harmony are discernible on close observation. Among the small grosbeaks, pairs of which sit together, the intimate relation is never disturbed; even over the feeding-cup there is no quarrelling. They stand highest in this respect among birds. Love-tokens are exchanged by pressing of beaks together—a veritable kissing, accompanied with loving gestures. They are also more sociable, and even at nesting-time more peaceable, than other birds. In the case of other grosbeaks, when the male bird sits by the female in the nest, there are various demonstrations of affection, but also slight occasional disputes, especially about feedingtime. Next in order come the small parrots, which also appear almost inseparable. The male bird feeds his companion with seeds from the crop. This goes on quite regularly during the hatching, and until the young are somewhat grown. During all this time the hen-bird, which broods alone, never leaves the nest but for a few minutes, and the cock shews such affectionate care, that the whole day he seems to do nothing but take food and give it again. Yet even this loving union is marred from time to time, even during the hatching-time, with quarrels that even come to blows. Again, the male bird of a pair of chaffinches only occasionally sits on the eggs or young, but he watches the nest very carefully, singing to his mate the while, accompanies the hen in flight, and helps her in feeding the young.

The marriage unions of parrots present great differences. The long-tailed Australian parrots, beautiful in plumage, but mentally inferior, are not nearly so affectionate towards each other as the little short-tailed species. M. Russ, a careful observer, tells us that the male bird of the Australian Nymph Cockatoo generally remains by night with the female, and during the day sits much more than she does. Such parental care is rare. Many parrots, especially large species, are by no means peaceable in their sexual relations, and appear somewhat affectionate only at the time of nidification. Large parrots are commonly very excited at brooding-time, and ferocious towards other animals, and even men. All parrots shew affection by giving food out of the crop.

A quite peculiar wedlock is observable in some of the finches and other birds. 'In my aviary,' says M. Russ, 'I had a pair of saffron finches, at whose behaviour I was for some time quite astonished. The cock and the hen hunted and persecuted each other savagely for days and weeks together; it was not, as in the case of some other birds, mere sport and teasing, but a bitter strife; the end of which was that the male bird, which appeared to have the worst of it, made his escape altogether, and never returned. Yet these two birds nestled, and actually reared four young, though I could not perceive whether their hatred was laid aside, or at least abated, during the hatching.' Similar phenomena, though not so pronounced, occur amongst finches, parrots, birds of prey, &c.

We have already said that the grosbeaks express affection for one another. The male frequently also performs a dance before the object of his regard; he hops about in a droll courtesying manner, with outspread tail and nodding head, warbling at the same time a melodious ditty. The larger grosbeaks give forth peculiar sounds accompanied with a hopping movement. These lovedances are frequently to be noticed in bird-life; among the best known and most skilful in this respect are those of the black-cock, the love-making of which is exceedingly interesting to watch.

The strong pugnacity developed among birds at time of hatching is remarkable. Even the little gentle grosbeak will endeavour, by violent pecking, to drive away males of the same or closely

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related species from the neighbourhood of his loved one. The larger finches are often roused by the same zeal to a blind fury, which, in the case of the chaffinch, is frequently taken advantage of by the bird-catchers. The fights observed in nature between birds have most generally for their cause the emotions of love.

We come to another expression of affection in bird-life—namely, song. It is to a great extent of a purely emulative character, and not seldom is the contention so strong and persistent, that one of the two rivals, through over-exertion, falls lifeless to the ground. One may observe such rivalry in spring, in the woods and fields, between two neighbouring male finches, nightingales, and various other birds. And in the aviary it is to be observed not only among the excellent singers, such as the gray finches and red cardinals, but also in the comparatively silent grosbeaks.

But the singing of birds has of course also another aspect—it is the most potent means of wooing. And this is true not only as regards the sweet plaint of the nightingale, the melodious warbling of the finch, but also of the hoarse croaking of the crows, the ear-splitting screech of the jay, the murmur of the pigeons, and the like—doubtless the most bewitching tones they are able to produce. 'Hark! the lark at heaven's gate sings;' so says Shakspeare. And for what does the lark ascend and trill his cheerful lay in mid-air, but to sing in a spirit of kindness to his mate nestling on the ground within hearing of his notes; or as a versifier has pictured this delicate attention:

The lark on high now mounts the sky, All hear his pipe a-ringing; His mate on nest whom he loves best, Sits listening to his singing.

It can hardly be doubted that the response awakened in the heart of female birds in these circumstances is quite as genuinely tender as the notes addressed to them. The very birds of the air might teach a lesson to man—to the wretches who, in the bosom of civilisation, kick wives to death, and leave their children to die under the accumulated miseries of want and desolation!

THE MONTH:

SCIENCE AND ARTS.

At the meeting of the Iron and Steel Institute last month, Mr C. W. Siemens, F.R.S., was elected President: to the honour of the Institute, be it recorded. In his inaugural address he discussed a question on which he has bestowed much thought, namely fuel. The coal-fields of the globe, so far as at present known, comprise two hundred and seventy thousand square miles, one hundred and ninety-two thousand of which are in the United States, eighteen thousand in Nova Scotia, and eleven thousand nine hundred in Great Britain. Mr Siemens is of opinion that at our present rate of consumption, we have in this country coal enough to last eleven hundred years; and that if the consumption should tend to increase, it will be kept in check by the economical processes of heating that remain to be discovered. And in many parts of the world there are underground stores of gas that can be made available as fuel, as exemplified by the seventy furnaces at Pittsburgh, which do all their puddling and reheating by means of the gas flowing through eighteen miles of pipe from its source in Pennsylvania.

As an example of the saving that can be effected by mere mechanical contrivance, we take a new ship of the Inman line trading between Liverpool and New York, in which the old style of engine has given place to the 'modern double cylinder compound engines,' which leave a much larger space for cargo than the old engines, and burn about sixty-five tons of coal per day, instead of one hundred and fifteen tons. The saving in the article of fuel is thus seen to be very great, even for a single ship.

Of course iron and steel were prominent topics of discussion at the meeting, and the conclusion to be drawn therefrom is, that in ship-building and other mechanical operations steel will take the place of iron. The torpedo vessel *Lightning*, which steams nineteen knots an hour, is already an evidence of what can be done by the combined lightness and strength of steel; another is promised by Admiral Sartorius, which will cleave the water at the rate of twenty-four knots, and steel ships of large size are building and to be built for the government. In this way the peaceful arts become diverted to warlike purposes, and heighten the cost of war to a prodigious extent.

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The future of steel, said Mr Bramwell, F.R.S., in his lecture at the Royal Institution, is to supersede iron for almost everything except the forge-work of common blacksmiths; and further, that part of the province of cast-iron, such as toothed-wheels and castings of complex form, which now, thanks to Riepe's improved construction of moulds, can be produced from molten steel.

Mr Siemens' process for the manufacture of steel leaves nothing to chance. The quality of steel is always that which was foreseen and desired; and the samples, when submitted to the severe tests imposed by the Admiralty, are never found to fail.

But Professor Barff's discovery seems to shew that iron will not be easily superseded. If iron can be produced that will not under any circumstances get rusty, iron will become more useful than ever. The discovery is this: that if hot iron is placed in a chamber of superheated steam, it takes

on a black coat which is magnetic oxide, and this coat is so hard and impervious to atmospheric influences that rust will not form upon it. The hotter the steam in which the process is carried on, the harder is the coat: after an exposure of seven hours to twelve hundred degrees, it will resist a file. Consequently the strength of the iron is greatly increased, and it can never become weakened by rust. The importance of this fact can hardly be overrated in connection, for instance, with iron plates for boilers and ships, in which unlimited strength would be highly prized.

We are told that the protecting coat can be put on at small cost, and that it will probably be made use of for iron goods of every description. 'Copper vessels will no longer possess any advantages for cooking, and iron saucepans will no longer need to be tinned. Lead pipes for the conveyance of water will in all probability be entirely superseded; and there can be no doubt that new uses for incorrodible iron will every day suggest themselves. Messrs Penn of Greenwich are about to undertake a series of trials for the purpose of testing the strength of the prepared articles, so that they may become able to speak with authority upon the fitness of the protected iron for bridge girders and architectural purposes.'

How to make iron without producing slag is a question which, if any one can answer satisfactorily, his reward shall be great in fame and fortune. In Yorkshire alone, the blast-furnaces pour out more than four million tons of slag a year, from which fact the enormous quantity produced throughout the kingdom can be judged of. Sixteen million tons of refuse! What can be done with it? In some places, land has been bought or hired to provide space for the ugly heaps, and many attempts have been made to lessen the accumulation by finding uses for the slag. It has been made into blocks and bricks for paving; into slabs, pipes, brackets, and friezes; into cement; into sand for fertilising purposes; and while in the molten condition, has been blown into a substance resembling cotton-wool. But some of these attempts have failed, and not one has sufficed to diminish the heaps of slag. And now another suggestion, based on the fact that slag is vitreous, is put forth, namely to convert it into glass. A mixture of sand, soda, and slag melted in a furnace will come out as glass. The experiment would not be expensive, for slag in any quantity may be had for nothing.

If some of those ingenious individuals who write so frequently to the Admiralty or to the Royal Society announcing that they have discovered the true place of the axis of the earth, or the true explanation of the precession of the equinoxes, or the cause of compass deviation, would only turn their attention to the questions in the foregoing paragraph, they might perhaps make practical discoveries which would be capable of proof, and potential of profit.

Last session a paper on the Best Method of Propelling Steamships was read at the United Service Institution. In the discussion that followed, Admiral Selwyn said experiment had shewn that whether you divide the water by a very narrow fine bow, cleaving the fluid like an axe, or whether you put that narrow fine bow flat on the water, and drive it over the water, the resistance is for all practical purposes the same: having fine lines there is no more resistance in the one case than in the other. Experiment has shewn also that between the finest vessel of deep draught and a vessel of similar tonnage, built in the form of a segment of a sphere, there is no difference of resistance. 'But there is this remarkable difference in another way, that whereas the sharp deep-keeled vessel plunges constantly under water, and makes bad weather of it, the segment of the sphere always rides over the water with perfect ease.'

And at the meeting of Naval Architects, Mr Reed explained that a circular ironclad will float better and carry heavier weights than a ship of the ordinary shape, and yet not be deficient in speed.

At last a parliamentary committee has been appointed to collect evidence on the condition of the Thames and other rivers, on the best means of regulating them, and of economising the rainfall so that there shall be a sufficient supply of water at all seasons. This is a great question: human requirements confronting the forces of nature with a view to harmonious co-operation. According to a statement made at a meeting of the Institution of Civil Engineers, the quantity of water that flows daily over Teddington weir is 3,223,125 tons; hence the Thames will count for something in the inquiry. Besides which, we may remember that the commerce carried by the royal river amounts to nine million tons annually.

At a recent meeting of the Franklin Institute, Philadelphia, there were exhibited an Odontograph for laying out the teeth of gear-wheels; an exhaust nozzle for quieting the noise of safety-valves and escape-pipes; an aspirator for ventilating mill-stones, and a horse-shoe intended to prevent slipping on a smoothly paved road. Readers desirous of further particulars must write to Philadelphia; but if that 'quieting nozzle' can only be made available, passengers at railway stations and on board steamboats will be spared the deafening roar that now annoys them, and will feel grateful accordingly.

The last published volume of *Transactions* of the Royal Society of Victoria contains a paper entitled, 'Is the Eucalyptus a Fever-destroying Tree?' a question which, as our readers are aware, is not less interesting here in Europe than in Australia. Baron von Mueller, government botanist at Melbourne, has described more than one hundred and thirty species of Eucalyptus: some grow into forests of great extent both on high and low table-land, others form dense desert scrub, while others are so distributed as to impart a park-like appearance to the landscape. The leaves are evergreen, and so arranged that the light and heat of the sun fall equally on each side; and the roots are dispersive and drain water largely from the soil. Besides the general constituents of a ligneous vegetation, the Eucalyptus contains a gum-resin, a volatile acid, and a peculiar volatile oil. The finest forests, *Eucalyptus amygdalina*, extend inland about one hundred miles, beyond

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which the scrub species prevail. When by vicissitude of season the seaward species are poor in volatile oil, then the scrub is rich, and vice versâ. The extent of scrub and forest in the three colonies of New South Wales, Victoria, and South Australia is so great that the quantity of oil therein contained is estimated at 96,877,440,000 gallons. On this Mr Bosisto, the author of the paper above referred to, remarks: 'Considering that the same condition exists throughout the major part of Australia ... we cannot arrive at any other conclusion than that the whole atmosphere of Australia is more or less affected by the perpetual exhalation of those volatile bodies.' The aroma thereof would be disagreeable, were it not that 'volatile oils have the power of changing oxygen into ozone while they are slowly oxidising.' It can hardly be doubted that the influence on climate must be important. 'Let,' says Mr Bosisto, 'a small quantity of any of the eucalyptus oils, but especially the oil of Eucalyptus amygdalina, be distributed sparingly in a sickchamber, or over any unpleasant substance, or add a small quantity to stagnant water, and the pleasure of breathing an improved air will immediately be manifest. The application of this to the climate of Australia has great force, for it is acknowledged that we possess about us, both in bush and town, a large amount of active oxygen, made frequently doubly so by our vigorous vegetation.'

The conclusion from the whole series of facts is, that the Eucalyptus *is* a fever-destroying tree. Baron von Mueller states that the *Eucalyptus amygdalina* in favourable situations grows to a height of four hundred feet, that it yields more oil than any other species, and bears the climate of Europe. The species of quickest growth is the *Eucalyptus globulus*.

In a communication to the Royal Astronomical Society, Mr W. M. Williams points out that obscure heat, such as that radiated from sun-spots, is much more largely absorbed by our atmosphere than the heat from the luminous parts of the sun's surface. Consequently the obscure heat exerts an influence on terrestrial climate as well as the luminous heat: the former in preventing or modifying the formation of clouds in the upper regions, and in producing thereby meteorological results which would be an interesting study. An illustration of what is meant by this is afforded by a well-known phenomenon, namely the general clearness of the sky during full moon, the clouds having been dissipated by the obscure heat-rays *reflected from the moon's surface*.

If observations of the difference of absorption between the two kinds of heat could be made at different heights, we should have, as Mr Williams says, 'a new means of studying the constitution of the interior of the sun and its relations to the photosphere. Direct evidence of selective absorption by our atmosphere may thus be obtained, which would go far towards solving one of the crucial solar problems—whether the darker regions are hotter or cooler than the photosphere?'

St Bartholomew's Hospital Reports contain an article by Dr Hollis in which an attempt is made to clear the study of mental physics of some of its obscurity, and to shew what are the functions of the brain and the way in which they may be studied. Examples are given of the effects of disease: a letter-sorter in the Post-office had experienced a failure of memory during two years, could not continue his employment, and eventually died. A large tumour was found in the substance of the left temporal lobe of the brain, which probably accounted for the loss of memory and inability to retain a mental picture of the pigeon-holes into which the letters were to be sorted. The organs of the brain were there, but their proper action was disturbed by the growth of disease, and the man of necessity ceased to be a letter-sorter. In concluding his article, Dr Hollis warns 'students of this seductive branch of medical science not to attempt to localise in the cortex too closely the several faculties of the mind. It is preposterous,' he remarks, 'to expect that similar cells are reserved for similar functions in all human brains, knowing what we do of the great diversity in man's mental nature, his various occupations, proclivities, and talents. Beyond the fact that there exists in our brains a posterior or retentive system, and an anterior or expressive system, our knowledge of this organ will not at present permit us to go.'

The effect of ether and of chloroform as anæsthetics, is attracting considerable attention. It is alleged that with chloroform, vascular paralysis frequently precedes respiratory paralysis; and an amount of chloroform insufficient to cause paralysis of respiration will often produce vascular paralysis, accompanied by such a diminution of blood-pressure as to render artificial respiration useless, since interchange between the gases of the air and blood does not take place. In this case artificial respiration does not recall life, and respiration ceases when artificial aid is removed. Experiments made with nitrite of amyl demonstrate its value as an antidote to the dangerous effects of chloroform; for which reason an American physician remarks: 'In the light of our present knowledge, it seems to me that humanity and science alike require that, when chloroform is used as an anæsthetic, the nitrite of amyl should be at hand, as one of the remedies whose efficiency is to be tested in case of impending danger.'

Medical practitioners in Calcutta have had their attention called to a species of parasite before undescribed, which has been found in large numbers in the intestines of persons who have died of cholera. According to a description recently published in the *Journal* of the Asiatic Society of Bengal, it is the *Amphistoma hominis*. 'I have never seen such parasites,' writes Dr Simpson, 'and apparently they are unknown to the natives. They are of a red colour, size of a tadpole, adhering to the mucous membrane, by a circular open mouth which they have the power of dilating and contracting.' It is to be hoped that these somewhat mysterious tormentors will not make their appearance in Europe. By way of precaution, we would just hint, 'See that you drink pure water.'

Of petroleum furnaces of a small size suited for high temperatures we find Quichenot's (lately noticed in these columns) is not the first attempt made, one having been introduced some years ago by Griffin, an English manufacturer. The difficulty with all petroleum furnaces is to keep them lighted until the casing or crucible is sufficiently hot to do this itself. The special liability

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which petroleum furnaces have to blow out at first, is to a great extent if not entirely overcome in Griffin's by the use of a wick. We are told by those who are practically conversant with the subject, that there are many difficulties in the use of petroleum as a fuel for furnace-work on a small scale, which, however, may be in a measure overcome by skilful management. But for small furnace operations it is now generally admitted that there is no fuel so well adapted as gas. A gas furnace of an entirely novel construction was introduced about a year ago by Mr Fletcher, F.C.S., of Warrington, in which the gas is burnt by an arrangement similar to Giffard's Injector, and requiring no more air than an ordinary small foot blower will supply with ease. The whole arrangement is exceedingly simple; and a refractory clay crucible can be fused in less than half an hour by an apparatus which (blower included) can easily be carried in one hand. Of gas furnaces not requiring a blast, the pioneer was Gore, who made the first draft furnace, burning gas, which would fuse cast-iron; and the principle made use of by Gore—that is, the subdivision of a large flame by air-spaces—has been since made use of successfully in many forms by different makers; but the maximum temperatures obtained in Gore's furnace have never yet been exceeded by any maker without the use of a blast. The nearest approach to a draft furnace giving really intense heats is, so far as we can ascertain, the Injector furnace of Mr Fletcher, which requires only about one-fifth of the air consumed to be supplied by blowing, the remaining part of the air being drawn in from the surrounding atmosphere by the action of the furnace itself.

MORE MISSING ARTICLES.

A LARGE party of merry people, old and young, were sitting on the sands at Cromer one day, when one of the party, the youngest and brightest, began for fun to 'make faces' with her fingers, and shewing the rest how to copy her. The way in which she used her fingers and handkerchief produced the most grotesque effects imaginable. Our heroine, Mrs Reynolds, a young matron of the party, followed suit, and soon succeeded; but, said Minnie the original starter of the fun: 'Take off your rings; they spoil the effect.' Accordingly two valuable rings—emerald and pearl were slipped off and laid within an open parasol. Soon after the party began to move, Mrs Reynolds took up her parasol, thought no more of the rings, and passed on with the rest home. Not till she reached the house and, preparing for lunch, was about to wash her hands, did it suddenly flash upon her what she had done. Alas, alas! those precious rings were lost on the sands, already crowded with excursionists and bathers. Away flew Mrs Reynolds, her hair streaming behind her (hung out to dry after bathing), her heart panting, her head aching, down to the shore again. There was the bathing woman calmly pursuing her calling all unconscious of the trouble; there too was Captain Wardell, politely concerned; there the groups of cousins warmly sympathetic; but alas! no trace of the jewels lost. How should they ever be found in such an expanse of sand?—no trace even left of the spot where the friends had sat. Still, resolved not to be baffled (the rings were not only precious but full of associative value), a place was fixed upon by Mrs Reynolds, and the hunt began. The sand, loose and fine, was turned over and over and sifted inch by inch, and the hapless owner was at length compelled to abandon the search and return home. Her weary feet had hardly turned in at the threshold when a panting voice behind caused her to turn. There stood a kindly cousin, scarlet with excitement and running, almost unable to speak, but holding up the emerald ring found by Captain Wardell's little son Gordon, a child of five years of age. As a last hope, his father had said to him: 'Come, Gordon, feel for it too in the loose sand;' and as if by magic, the child thrust in his little fat hand and pulled out the ring!

Of course this shewed they were on the right scent; and in three-quarters of an hour more the pearl ring also turned up. They had hunted in all for nearly two hours, in perfectly loose sand, on a wide shore; and as a fisherman said, it was indeed like 'hunting for a needle in a haystack.' The excitement throughout the little town of Cromer had been immense, owing to the crier having been sent round; and all the evening the story was being discussed by little groups of men and women, no doubt growing in interest by the repetition.

Another curious instance of losing and finding is worth recording. A gentleman walking along the shore of Hastings lost his ring. We think he was stretching after a dog in the water, but at anyrate the ring slipped off, and was not found again. A year after—it is even said on the very anniversary—the same gentleman was again strolling along the shore when a fisherman ran after him, and inquiring, 'Did you drop this, sir?' held up to him his own ring, lost twelve months before.

One more incident. A gentleman bought an umbrella, and taking it into his hand, put down a sovereign in payment. Presently the bill, having been made out, was presented; but when the shopman put his hand forth to take up the money, it could not be seen. The gentleman thought it extraordinary—the shopman equally so. The former was sure he had deposited the coin, the shopman equally certain that it had not reached his hands. What was to be done? It ended in the gentleman again paying the amount. Some little time after, the gentleman was again in the shop, and being there, took occasion to ask if the sovereign had ever been seen again. 'No,' said the young man; 'we never found it.' Just then the gentleman, opening his umbrella to shew what he required altered (some trifle or other), gave it a shake, when out rolled a sovereign; the very one of course so long missing. The strangest part of it is that the umbrella had been constantly used since the day it was bought.

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