

ALL THE YEAR ROUND.

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GREAT EXPECTATIONS.

BY CHARLES DICKENS.

CHAPTER XLII.

IN vain should I attempt to describe the astonishment and disquiet of Herbert, when he and I and Provis sat down before the fire, and I recounted the whole of the secret. Enough that I saw my own feelings reflected in Herbert's face, and, not least among them, my repugnance towards the man who had done so much for me.

What would alone have set a division between that man and us, if there had been no other dividing circumstance, was his triumph in my story. Saving his troublesome sense of having been "low" on one occasion since his return—on which point he began to hold forth to Herbert, the moment my revelation was finished—he had no perception of the possibility of my finding any fault with my good fortune. His boast that he had made me a gentleman, and that he had come to see me support the character on his ample resources, was made for me quite as much as for himself; and that it was a highly agreeable boast to both of us, and that we must both be very proud of it, was a conclusion quite established in his own mind.

"Though, look'ee here, Pip's comrade," he said to Herbert, after having discoursed for some time, "I know very well that once since I come back—for half a minute—I've been low. I said to Pip, I knowed as I had been low. But don't you fret yourself on that score. I ain't made Pip a gentleman, and Pip ain't agoing to make you a gentleman, not fur me not to know what's due to ye both. Dear boy, and Pip's comrade, you two may count upon me always having a gen-teel muzzle on. Muzzled I have been since that half a minute when I was betrayed into lowness, muzzled I am at the present time, and muzzled I ever will be."

Herbert said, "Certainly," but looked as if there were no specific consolation in this, and remained perplexed and dismayed. We were anxious for the time when he would go to his lodging, and leave us together, but he was evidently jealous of leaving us together, and sat late. It was midnight before I took him round to Essex-street, and saw him safely in at his own dark door. When it closed upon him, I

experienced the first moment of relief I had known since the night of his arrival.

Never quite free from an uneasy remembrance of the man on the stairs, I had always looked about me in taking my guest out after dark, and in bringing him back; and I looked about me now. Difficult as it is in a large city to avoid the suspicion of being watched, when the mind is conscious of danger in that regard, I could not persuade myself that any of the people within sight cared about my movements. The few who were passing, passed on their several ways, and the street was empty when I turned back into the Temple. Nobody had come out at the gate with us, nobody went in at the gate with me. As I crossed by the fountain, I saw his lighted back windows looking bright and quiet, and when I stood for a few moments in the doorway of the building where I lived, before going up the stairs, Garden-court was as still and lifeless as the staircase was when I ascended it.

Herbert received me with open arms, and I had never felt before, so blessedly, what it is to have a friend. When he had spoken some sound words of sympathy and encouragement, we sat down to consider the question, What was to be done?

The chair that Provis had occupied still remaining where it had stood—for he had a barrack way with him of hanging about one spot, in one unsettled manner, and going through one round of observances with his pipe and his negro-head and his jack-knife and his pack of cards, and what not, as if it were all put down for him on a slate—I say, his chair remaining where it had stood, Herbert unconsciously took it, but next moment started out of it, pushed it away, and took another. He had no occasion to say after that, that he had conceived an aversion for my patron, neither had I occasion to confess my own. We interchanged that confidence without shaping a syllable.

"What," said I to Herbert, when he was safe in another chair, "what is to be done?"

"My poor dear Handel," he replied, holding his head, "I am too stunned to think."

"So was I, Herbert, when the blow first fell. Still, something must be done. He is intent upon various new expenses—horses, and carriages, and lavish appearances of all kinds. He must be stopped, somehow."

"You mean that you can't accept——?"

"How can I?" I interposed, as Herbert paused. "Think of him! Look at him!"

An involuntary shudder passed over both of us. "Yet I am afraid the dreadful truth is, Herbert, that he is attached to me, strongly attached to me. Was there ever such a fate!"

"My poor dear Handel," Herbert repeated.

"Then," said I, "after all, stopping short here, never taking another penny from him, think what I owe him already! Then again: I am heavily in debt—very heavily for me, who have now no expectations at all—and I have been bred to no calling, and I am fit for nothing."

"Well, well, well!" Herbert remonstrated.

"Don't say fit for nothing."

"What am I fit for? I know only one thing that I am fit for, and that is, to go for a soldier. And I might have gone, my dear Herbert, but for the prospect of taking counsel with your friendship and affection."

Of course I broke down there; and of course Herbert, beyond seizing a warm grip of my hand, pretended not to know it.

"Anyhow, my dear Handel," said he presently, "soldiering won't do. If you were to renounce this patronage and these favours, I suppose you would do so with some faint hope of one day repaying what you have already had. Not very strong, that hope, if you went soldiering! Besides, it's absurd. You would be infinitely better in Clarriker's house, small as it is. I am working up towards a partnership, you know."

Poor fellow! He little suspected with whose money.

"But there is another question," said Herbert. "This is an ignorant determined man, who has long had one fixed idea. More than that, he seems to me (I may misjudge him) to be a man of a desperate and fierce character."

"I know he is," I returned. "Let me tell you what evidence I have seen of it." And I told him what I had not mentioned in my narrative; of that encounter with the other convict.

"See, then!" said Herbert; "think of this! He comes here at the peril of his life, for the realisation of his fixed idea. In the moment of realisation, after all his toil and waiting, you cut the ground from under his feet, destroy his idea, and make his gains worthless to him. Do you see nothing that he might do, under the disappointment?"

"I have seen it, Herbert, and dreamed of it ever since the fatal night of his arrival. Nothing has been in my thoughts so distinctly, as his putting himself in the way of being taken."

"Then you may rely upon it," said Herbert, "that there would be great danger of his doing it. That is his power over you as long as he remains in England, and that would be his reckless course if you forsook him."

I was so struck by the horror of this idea, which had weighed upon me from the first, and the working out of which would make me regard myself, in some sort, as his murderer, that I could not rest in my chair but began pacing to and fro. I said to Herbert, meanwhile, that even if Provis were recognised and taken in spite of

himself, I should be wretched as the cause, however innocently. Yes; even though I was so wretched in having him at large and near me, and even though I would far rather have worked at the forge all the days of my life, than I would have ever come to this!

But there was no raving off the question, What was to be done?

"The first and the main thing to be done," said Herbert, "is to get him out of England. You will have to go with him, and then he may be induced to go."

"But get him where I will, could I prevent his coming back?"

"My good Handel, is it not obvious that with Newgate in the next street, there must be far greater hazard in your breaking your mind to him and making him reckless, here, than elsewhere. If a pretext to get him away could be made out of that other convict, or out of anything else in his life, now."

"There, again!" said I, stopping before Herbert, with my open hands held out as if they contained the desperation of the case. "I know nothing of his life. It has almost made me mad to sit here of a night and see him before me, so bound up with my fortunes and misfortunes, and yet so unknown to me, except as the miserable wretch who terrified me two days in my childhood!"

Herbert got up, and linked his arm in mine, and we slowly walked to and fro together, studying the carpet.

"Handel," said Herbert, stopping, "you feel convinced that you can take no further benefits from him; do you?"

"Fully. Surely you would, too, if you were in my place?"

"And you feel convinced that you must break with him?"

"Herbert, can you ask me?"

"And you have, and are bound to have, that tenderness for the life he has risked on your account, that you must save him, if possible, from throwing it away. Then you must get him out of England before you stir a finger to extricate yourself. That done, extricate yourself, in Heaven's name, and we'll see it out together, dear old boy."

It was a comfort to shake hands upon it, and walk up and down again, with only that done.

"Now, Herbert," said I, "with reference to gaining some knowledge of his history. There is but one way that I know of. I must ask him point-blank."

"Yes. Ask him," said Herbert, "when we sit at breakfast in the morning." For he had said, on taking leave of Herbert, that he would come to breakfast with us.

With this project formed, we went to bed. I had the wildest dreams concerning him, and woke unrefreshed; I woke, too, to recover the fear which I had lost in the night, of his being found out as a returned transport. Waking, I never lost that fear.

He came round at the appointed time, took out his jack-knife, and sat down to his meal.

He was full of plans "for his gentleman's coming out strong, and like a gentleman," and urged me to begin speedily upon the pocket-book, which he had left in my possession. He considered the chambers and his own lodging as temporary residences, and advised me to look out at once for "a fashionable crib" in which he could have "a shake-down," near Hyde Park. When he had made an end of his breakfast, and was wiping his knife on his leg, I said to him, without a word of preface:

"After you were gone last night, I told my friend of the struggle that the soldiers found you engaged in on the marshes, when we came up. You remember?"

"Remember!" said he. "I think so!"

"We want to know something about that man—and about you. It is strange to know no more about either, and particularly you, than I was able to tell last night. Is not this as good a time as another for our knowing more?"

"Well!" he said, after consideration. "You're on your oath, you know, Pip's comrade?"

"Assuredly," replied Herbert.

"As to anything I say, you know," he insisted. "The oath applies to all."

"I understand it to do so."

"And look'ee here! Whatever I done, is worked out and paid for," he insisted again.

"So be it."

He took out his black pipe and was going to fill it with negro-head, when, looking at the tangle of tobacco in his hand, he seemed to think it might perplex the thread of his narrative. He put it back again, stuck his pipe in a button-hole of his coat, spread a hand on each knee, and, after turning an angry eye on the fire for a few silent moments, looked round at us and said what follows.

CHAPTER XLII.

"DEAR boy and Pip's comrade. I am not a going fur to tell you my life, like a song or a story-book. But to give it you short and handy, I'll put it at once into a mouthful of English. In jail and out of jail, in jail and out of jail, in jail and out of jail. There, you've got it. That's *my* life pretty much, down to such times as I got shipped off, arter Pip stood my friend.

"I've been done everything to, pretty well—except hanged. I've been locked up, as much as a silver tea-kettle. I've been carted here and carted there, and put out of this town and put out of that town, and stuck in the stocks, and whipped and worried and drove. I've no more notion where I was born than you have—if so much. I first become aware of myself, down in Essex, a thieving turnips for my living. Summun had run away from me—a man—a tinker—and he'd took the fire with him, and left me wery cold.

"I know'd my name to be Magwitch, christen'd Abel. How did I know it? Much as I know'd the birds' names in the hedges to be chaffinch, sparrer, thrush. I might have

thought it was all lies together, only as the birds' names come out true, I supposed mine did.

"So fur as I could find, there warn't a soul that see young Abel Magwitch, with as little on him as in him, but wot caught fright at him, and either drove him off, or took him up. I was took up, took up, took up, to that extent that I reg'larly grow'd up took up.

"This is the way it was, that when I was a ragged little creetur as much to be pitied as ever I see (not that I looked in the glass, for there warn't many insides of furnished houses known to me), I got the name of being hardened. 'This is a terrible hardened one,' they says to prison visitors, picking out me. 'May be said to live in jails, this boy.' Then they looked at me, and I looked at them, and they measured my head, some on 'em—they had better a measured my stomach—and others on 'em giv me tracts what I couldn't read, and made me speeches what I couldn't understand. They always went on agen me about the Devil. But what the Devil was I to do? I must put something into my stomach, mustn't I?—Howsomever, I'm a getting low, and I know what's due. Dear boy and Pip's comrade, don't you be afeerd of me being low.

"Tramping, begging, thieving, working sometimes when I could—though that warn't as often as you may think, till you put the question whether you would ha' been over ready to give me work yourselves—a bit of a poacher, a bit of a labourer, a bit of a waggoner, a bit of a haymaker, a bit of a hawker, a bit of most things that don't pay and lead to trouble, I got to be a man. A deserting soldier in a Travellers' Rest, wot lay hid up to the chin under a lot of taters, learnt me to read; and a travelling Giant wot signed his name at a penny a time learnt me to write. I warn't locked up as often now as formerly, but I wore out my good share of key-metal still.

"At Epsom races, a matter of over twenty year ago, I got acquainted wi' a man whose skull I'd crack wi' this poker, like the claw of a lobster, if I'd got it on this hob. His right name was Compeyson; and that's the man, dear boy, wot you see me pounding in the ditch, according to wot you truly told your comrade arter I was gone last night.

"He set up fur a gentleman, this Compeyson, and he'd been to a public boarding-school and had learning. He was a smooth one to talk, and was a dab at the ways of gentlefolks. He was good-looking too. It was the night afore the great race, when I found him on the heath in a booth that I know'd on. Him and some more was a sitting among the tables when I went in, and the landlord (which had a knowledge of me, and was a sporting one) called him out, and said, 'I think this is a man that might suit you'—meaning I was.

"Compeyson, he looks at me very noticing, and I look at him. He has a watch and a chain and a ring and a breast-pin and a handsome suit of clothes.

“‘To judge from appearances, you’re out of luck,’ says Compeyson to me.

“‘Yes, master, and I’ve never been in it much.’ (I come out of Kingston Jail last on a vagrancy committal. Not but wot it might have been for something else; but it warn’t.)

“‘Luck changes,’ says Compeyson; ‘perhaps yours is going to change.’

“‘I says, ‘I hope it may be so. There’s room.’

“‘What can you do?’ says Compeyson.

“‘Eat and drink,’ I says; ‘if you’ll find the materials.’

“‘Compeyson laughed, looked at me again very noticing, giv me five shillings, and appointed me for next night. Same place.

“‘I went to Compeyson, next night, same place, and Compeyson took me on to be his man and pardner. And what was Compeyson’s business in which we was to go pardners? Compeyson’s business was the swindling, hand-writing forging, stolen bank-note passing, and such-like. All sorts of traps as Compeyson could set with his head, and keep his own legs out of and get the profits from and let another man in for, was Compeyson’s business. He’d no more heart than a iron file, he was as cold as death, and he had the head of the Devil afore mentioned.

“‘There was another in with Compeyson, as was called Arthur—not as being so chrisen’d, but as a surname. He was in a Decline, and was a shadow to look at. Him and Compeyson had been in a bad thing with a rich lady some years afore, and they’d made a pot of money by it; but Compeyson betted and gamed, and he’d have run through the king’s taxes. So Arthur was a dying, and a dying poor and with the horrors on him, and Compeyson’s wife (which Compeyson kicked mostly) was a having pity on him when she could, and Compeyson was a having pity on nothing and nobody.

“‘I might a took warning by Arthur, but I didn’t; and I won’t pretend I was partick’ler—for where ’ud be the good on it, dear boy and comrade? So I begun wi’ Compeyson, and a poor tool I was in his hands. Arthur lived at the top of Compeyson’s house (over nigh Brentford it was), and Compeyson kept a careful account agen him for board and lodging, in case he should ever get better to work it out. But Arthur soon settled the account. The second or third time as ever I see him, he come a tearing down into Compeyson’s parlour late at night, in only a flannel gown, with his hair all in a sweat, and he says to Compeyson’s wife, ‘Sally, she really is up-stairs alounger me now, and I can’t get rid of her. She’s all in white,’ he says, ‘wi’ white flowers in her hair, and she’s awful mad, and she’s got a shroud hanging over her arm, and she says she’ll put it on me at five in the morning.’

“‘Says Compeyson: ‘Why, you fool, don’t you know she’s got a living body? And how should she be up there, without coming through the door, or in at the window, and up the stairs?’

“‘I don’t know how she’s there,’ says Arthur, shivering dreadful with the horrors, ‘but she’s standing in the corner at the foot of the bed, awful mad. And over where her heart’s broke—you broke it!—there’s drops of blood.’

“‘Compeyson spoke hardy, but he was always a coward. ‘Go up alounger this drivelling sick man,’ he says to his wife, ‘and Magwitch, lend her a hand, will you?’ But he never come nigh himself.

“‘Compeyson’s wife and me took him up to bed agen, and he raved most dreadful. ‘Why look at her!’ he cries out. ‘She’s a shaking the shroud at me! Don’t you see her? Look at her eyes! Ain’t it awful to see her so mad?’ Next, he cries, ‘She’ll put it on me, and then I’m done for! Take it away from her, take it away!’ And then he catched hold of us, and kep on a talking to her, and answering of her, till I half believed I see her myself.

“‘Compeyson’s wife, being used to him, giv him some liquor to get the horrors off, and by-and-by he quieted. ‘Oh, she’s gone! Has her keeper been for her?’ he says. ‘Yes,’ says Compeyson’s wife. ‘Did you tell him to lock her and bar her in?’ ‘Yes.’ ‘And to take that ugly thing away from her?’ ‘Yes, yes, all right.’ ‘You’re a good creetur,’ he says, ‘don’t leave me, whatever you do, and thank you!’

“‘He rested pretty quiet till it might want a few minutes of five, and then he starts up with a scream, and screams out, ‘Here she is! She’s got the shroud again. She’s unfolding it. She’s coming out of the corner. She’s coming to the bed. Hold me both on you—one of each side—don’t let her touch me with it. Hah! she missed me that time. Don’t let her throw it over my shoulders. Don’t let her lift me up to get it round me. She’s lifting me up. Keep me down!’ Then he lifted himself up hard, and was dead.

“‘Compeyson took it easy as a good rid-dance for both sides. Him and me was soon busy, and first he swore me (being ever artful) on my own book—this here little black book, dear boy, what I swore your comrade on.

“‘Not to go into the things that Compeyson planned, and I done—which ’ud take a week—I’ll simply say to you, dear boy, and Pip’s comrade, that that man got me into such nets as made me his black slave. I was always in debt to him, always under his thumb, always a working, always a getting into danger. He was younger than me, but he’d got craft, and he’d got learning, and he overmatched me five hundred times told and no mercy. My Missis as I had the hard time wi’—Stop though! I ain’t brought her in—”

He looked about him in a confused way, as if he had lost his place in the book of his remembrance; and he turned his face to the fire, and spread his hands broader on his knees, and lifted them off and put them on again.

“‘There ain’t no need to go into it,’ he said, looking round once more. “‘The time wi’

Compeyson was a'most as hard a time as ever I had; that said, all's said. Did I tell you as I was tried, alone, for misdemeanour, while with Compeyson?"

I answered, No.

"Well!" he said, "I was, and got convicted. As to took up on suspicion, that was twice or three times in the four or five year that it lasted; but evidence was wanting. At last, me and Compeyson was both committed for felony—on a charge of putting stolen notes in circulation—and there was other charges behind. Compeyson says to me, 'Separate defences, no communication,' and that was all. And I was so miserable poor, that I sold all the clothes I had, except what hung on my back, afore I could get Jagers."

"When we was put in the dock, I noticed first of all warty a gentleman Compeyson looked, wi' his curly hair and his black clothes and his white pocket-handkercher, and what a common sort of wretch I looked. When the prosecution opened and the evidence was put short, afore-hand, I noticed how heavy it all bore on me, and how light on him. When the evidence was giv in the box, I noticed how it was always me that had come for'ard, and could be swore to, how it was always me that the money had been paid to, how it was always me that had seemed to work the thing and get the profit. But, when the defence come on, then I see the plain plainer; for, says the counsellor for Compeyson, 'My lord and gentlemen, here you has afore you, side by side, two persons as your eyes can separate wide; one, the younger, well brought up, who will be spoke to as such; one, the elder, ill brought up, who will be spoke to as such; one, the younger, seldom if ever seen in these here transactions, and only suspected; t'other, the elder, always seen in 'em and always wi' his guilt brought home. Can you doubt, if there is but one in it, which is the one, and, if there is two in it, which is much the worst one?' And such-like. And when it come to character, warn't it Compeyson as had been to the school, and warn't it his school-fellows as was in this position and in that, and warn't it him as had been know'd by witnesses in such clubs and societies, and nowt to his disadvantage? And warn't it me as had been tried afore, and as had been know'd up hill and down dale in Bridewells and Look-Ups? And when it come to speech-making, warn't it Compeyson as could speak to 'em wi' his face dropping every now and then into his white pocket-handkercher—ah! and wi' verses in his speech, too—and warn't it me as could only say, 'Gentlemen, this man at my side is a most precious rascal?' And when the verdict come, warn't it Compeyson as was recommended to mercy on account of good character and bad company, and giving up all the information he could agen me, and warn't it me as got never a word but Guilty? And when I says to Compeyson, 'Once out of this court, I'll smash that face of yourn?' ain't it Compeyson as prays the Judge to be protected, and gets two turnkeys stood betwixt us? And when

we're sentenced, ain't it him as gets seven year and me fourteen, and ain't it him as the Judge is sorry for, because he might a done so well, and ain't it me as the Judge perceives to be a old offender of violent passion, likely to come to worse?"

He had worked himself into a state of great excitement, but he checked it, took two or three short breaths, swallowed as often, and stretching out his hand towards me said, in a reassuring manner, "I ain't a going to be low, dear boy!"

He had so heated himself that he took out his handkerchief and wiped his face and head and neck and hands, before he could go on.

"I had said to Compeyson that I'd smash that face of his, and I swore Lord smash mine! to do it. We was in the same prison-ship, but I couldn't get at him for long, though I tried. At last I come behind him and hit him on the cheek to turn him round and get a smashing one at him, when I was seen and seized. The black-hole of that ship warn't a strong one, to a judge of black-holes that could swim and dive. I escaped to the shore, and I was a hiding among the graves there, envying them as was in 'em and all over, when first I see my boy!"

He regarded me with a look of affection that made him almost abhorrent to me again, though I had felt great pity for him.

"By my boy, I was giv to understand as Compeyson was out on them marshes too. Upon my soul, I half believe he escaped in his terror, to get quit of me, not knowing it was me as had got ashore. I hunted him down. I smashed his face. 'And now,' says I, 'as the worst thing I can do, caring nothing for myself, I'll drag you back.' And I'd have swum off, towing him by the hair, if it had come to that, and I'd a got him aboard without the soldiers."

"Of course he'd much the best of it to the last—his character was so good. He had escaped when he was made half wild by me and my murderous intentions; and his punishment was light. I was put in irons, brought to trial again, and sent for life. I didn't stop for life, dear boy and Pip's comrade, being here."

He wiped himself again, as he had done before, and then slowly took his tangle of tobacco from his pocket, and plucked his pipe from his button-hole, and slowly filled it, and began to smoke.

"Is he dead?" I asked, after a silence.

"Is who dead, dear boy?"

"Compeyson."

"He hopes I am, if he's alive, you may be sure," with a fierce look. "I never heard no more of him."

Herbert had been writing with his pencil in the cover of a book. He sortly pushed the book over to me, as Provis stood smoking with his eyes on the fire, and I read in it:

"Young Havisham's name was Arthur. Compeyson is the man who professed to be Miss Havisham's lover."

I shut the book and nodded slightly to Her-

bert, and put the book by; but we neither of us said anything, and both looked at Provis as he stood smoking by the fire.

THE TREASURES OF THE EARTH.

IN TWO CHAPTERS. CHAPTER II.

It is a curious fact, that while most of the stones called "precious" were worn in former times as amulets, to ward off danger and mischief, and were valued greatly for such purposes, and while almost all the varieties of agate had special uses, the onyx was considered to excite spleen, melancholy, and mental disturbance in the wearer, especially when used as a neck ornament. As, however, the ordinary agate was worn to calm pain and sooth the mind, and the mere *scent* of some varieties—a peculiarity and difficult thing to ascertain the existence of—would turn away tempests, even arresting the impetuosity of torrents, the line of distinction must have been very nicely drawn. So active were stones of this kind supposed to be, that the celebrated Milo of Crotona is said to have been indebted to a certain chalcodonyx that he wore, for the execution of his feats of wonderful strength. Of the other stones, the beautiful heliotrope, or blood-stone, was thought to render the wearer invisible, while jasper would stop any excess of bleeding arising from natural causes.

All the minerals here mentioned consist of quartz or silica, combined, when coloured, with a small quantity of metallic oxides and earthy minerals. Thus the amethyst and other violet and blue colours are produced by manganese, and the rose tint is owing to the same metal. Almost all the reds are due to iron, and the yellow and green to very minute quantities of minerals not very clearly determined. The brown of cairngorm is the result of a little bitumen.

It is astonishing to consider how very small a quantity of foreign material will sometimes alter the character and appearance of crystals. Thus the cat's-eye is a gem of greenish tint, milky and opal-like. When cut in a certain way, it presents a floating white band of light, and certain specimens emit one or more brilliant rays, coloured or colourless, issuing apparently from one point, and extending to the extremity of the stone. Compared with one of those balls of crystals sometimes cut into the same form, or with the lens of a pair of pebble spectacles, it is hardly possible to imagine that there is so little difference as really exists between the two minerals in their chemical composition. In point of fact, the presence within the crystal of a few delicate threads of white asbestos, seems to produce all the modifications, except that of colour, and the cause of the colour itself is owing to some substance, the quantity of which is too small to enable chemists to determine its nature. Certainly the method of small doses, as advocated by homœopaths, is not without a certain analogy in nature, and doses too small to be appreciated by mortal chemistry are sufficient

sometimes to produce results on minerals rather startling in their magnitude.

There is one fact with regard to specimens of quartz—or crystals, as they are often called—which is very curious and interesting. Small cavities not unfrequently occur within them, sometimes empty, but often filled with fluid. By exposure to cold this fluid may be frozen, and very often a slight increase of temperature converts it into transparent vapour, while by optical methods of examination employed under the microscope, the properties of the fluid can occasionally be detected. Indeed, the cavities have been so large that the fluid could be extracted in sufficient quantity for examination. It might be expected that some new element or compound would be thus obtained—some secret of nature's laboratory—some substance from the interior of the earth, only thus brought within our knowledge, locked up in one of the hard crystalline minerals elaborated far beneath, out of our sight. No such result is obtained, and no such mystery laid bare, for we find almost all the cavities in question to be occupied by water mixed only with some common salt or acid, held in solution. Vapour of water, then, must be contained in rocks during the whole period of their formation in the earth, much in the same state of admixture in which we know that it is present in the atmosphere to form clouds. Thus these wonders of nature and treasures of art are the result of some process only the more wonderful because it is so extremely simple, being one by whose agency ordinary familiar substances are worked up, together with water, under certain conditions of heat, bringing about in this way the magic of our most varied and beautiful gems.

Mixed with water in a different way—the water distributed in every part, and not collected in cavities—the same mineral, quartz or silica, becomes that very curious and fantastic stone, the opal. The proper colour of this gem is a peculiar pearl grey, showing a fluctuating pale red, or wine yellow tint, when seen between the eye and the light. With reflected light it presents all the colours of the rainbow, showing a flame-red, violet, purple, blue, emerald green, and golden yellow. The rays of light and colour shoot forth from a fine opal (noble opal, in technical language) with the most vivid effulgence, and the more flaws it contains the more does it reflect, and the greater value is attached to it. In some rare cases, opals have been found nearly black, but glowing like a fine ruby. Other opals are spangled, and sometimes not more than one colour is seen. In all cases, however, the foundation of the stone independent of the colour, which is entirely an optical effect, consists of a peculiar milky translucent mass, which at once marks the gem.

Opals are very rarely found of large size, the dimensions of a hazel-nut or walnut being seldom exceeded. They are never cut in facets, and are generally set surrounded by brilliants, whose bright dazzling reflections contrast well with the calm moon-like beauty and rich soft