

THE DISCOVERY OF THE NEW WORLD IN THE MOON

by Charles F. Hibbard

Isaac Newton's widowed mother left him when he was three, to wed the wealthy Reverend Barnabas Smith, rector of a nearby parish, who would have nothing to do with her firstborn. Newton's lonely childhood was passed at the poor family manor of Woolsthorpe, in Lincoln, in the care of the widow's mother, Grannie Ayscough. At the death of the sexually active old minister, having dutifully borne him three children, the Widow Hannah returned to Woolsthorpe with her brood. It was August, 1653, and Newton was in his eleventh year.

The narrator, Christopher Cannon, then a youthful giant of sixteen, has identified himself as a lifelong friend, as the story resumes:

The Dutch no longer made bold in our Channel when I returned from the sea. We had driven them into the shallows at the Texel and left them dismasted and burning, the rapacious Von Tromp laid low at last.¹ Noll Cromwell had heretofore turned out the Rump for battenning on Royalist bribes, and summoned Barebone's Parliament, of his own choosing, to sanctify his tyranny over our new-found freedom. If he was more a martinet than the King he'd cut in two, our victories at sea were the warrant for high parades, to take out the sting of Puritan morality, and word got about that he'd soon have himself made Lord Protector, that he might command the obeisance of the peers whose voice he'd suppressed.

It was late in the summer of '53 when I crossed into Lincoln again. The swelling fields gave off the sweet, green odor of summer, the swallows had begun to try their wings for the long flight south, and the orchards were plump for the picking.

The atmosphere at Woolsthorpe Manor, however, was less cordial. At the scullery door, a sulky maid with a pretty mouth opened to me and offered to pour boiling water on my boots did I not take myself off at once.

"I'm looking for Master Newton, Doll," I hushed her, yet wary of Grannie Ayscough.

"'Tis nought to me, Cannon, if you're looking for the second coming," she snapped. "We've word Father Barnabas is near the end, and we're bidden cook for the wake. There's no time for the likes of you!"

She gestured with the boiling cauldron.

It was little Dolly Plimpton, grown very respectable, with her dark curls caught up under a tidy white cap, she knowing very well what a vision she made for a mariner just out of Monk's navy, with gunpowder and blood yet under his nails. She was laced tight in a purple bodice from waist to nipple, though tremulous and vulnerable above. A full skirt tied with ribands betrayed nought of its treasures save peeping petticoats, yet suggested with winsome guile that access to her virtue was not wholly out of the question. Clocked stockings guided her sturdy calves into clumsy buckled shoes, but I surmised 'twere no more than the work of a moment to have her out of them as well.

"I'll content myself with you, Dolly Plimpton, till Isaac comes along," said I sociably, relieving her of the cauldron. "Let's hope 'tis not too soon."

I pulled down her hair till it tumbled over her shoulders as I remembered it, swept her into a lusty embrace, and stopped her caterwauling with a kiss.

"Mast R'Isaac down in orchard, Christopher," grinned the cook over her shoulder. "Take hussy wi' ye. She's na been plumbed since ye left for sea."

The lass had ceased to struggle in my arms, and her own now wound urgently about my neck. Her shoes fell off, and her warm, stockinged toes crept up and down my ankles.

"Cool! Look at size of un!" gasped the chambermaid enviously. "Yon lout'll squeeze the breath out'n 'er."

I swirled my prize to my shoulder, rejoicing to be back in Lincoln, where a maid could be had for the sport of it without whining for a month's pay.

"'Twould seem Dolly Plimpton's ready to do her part to hearten the Navy," I chuckled, starting off. "Nor could I ask for a comelier lookout to man the bowsprit."

"Just 'ave a care for 'ere own bowsprit goin' to windward," sniffed the cook. "Best leave 'er in haymow, lest Mast R'Isaac take fancies of 'is own."

"Been oglin' 'er cleavage, 'e 'as," babbled the chambermaid spitefully.

"'Tis as close as he'll get to't with his lordly airs," vowed Dolly Plimpton, settling her soft bottom primly against my neck.

"Do 'e keep 'em both out till midnight," she whickered, "I'll favor 'e m'sel'."

I boggled at the vision as I made for the orchard, striving to keep in mind it was Isaac I'd come to see. It was early morning, the smoke of the breakfast ham was on the air, and a thin crescent moon tempted the sun into a limpid sky.

"The haymow is yonder, Christopher," piped the lookout, pointing with a toe and giggling. "Must you hurry so? I'm not undone."

She had begun to pluck at the laces of her bodice.

"Hold on," I commanded gruffly. "The day's still young. We'll look up Isaac beforehand, to learn how he bears the news of Father Barnabas."

She tittered as she stuffed herself back.

"I've ne'er seen the wight laugh, Christopher, but I'll warrant 'twill have set him all agrin behind that sullen pout."

"And moving his Maker the old goat won't last out the day," I affirmed.

"M'lady has served the parson well, with a drop of three. Do you suppose

she'll bring 'em back to Woolsthorpe, to comfort Master Isaac?"

"M'lord will take faint comfort in his kin," I prophesied. "He wants the Widow Hannah to himself. But she'll come back, you may be certain. There's no place in a rectory for a handsome widow, however wealthy she may be."

We were approaching the sagging orchard, and Dolly Plimpton's arm tightened about my head.

"'Tis all well to dream, Christopher," she murmured, "but the old sinner's still drawing breath, and his vitality's not to be questioned. I'm fearful he may survive, to hold her at North Witham. In that event, Master Isaac will ne'er forgive me that I've left cook to do the pans and come away from my work. He'll bear tales to Grannie Ayscough, and 'twill be the end of me at Woolsthorpe."

"Breathe easy," said I, "and save yourself for me. M'lord will have no idea what we're up to, for such innocent byplay as we intend has ne'er crossed his mind."

She squirmed uncomfortably.

"He sought to kiss me, and pinched my behind in the woodshed," she complained. "When I cried, he offered me a quotation from the Bible."

"'Tis time he tried his spurs," I defended, recalling Isaac's dream. "He's in his eleventh year."

"He'll not try his tiny spur on me!" she retorted. "I'd sooner make love to a beansprout."

I swallowed.

"That's as may be," I hastened. "Should he notice you at all, which is unlikely, I'll explain you've come to show me the way."

She giggled again, and strained forward to pull off her clocked stockings, which done, she bound them possessively about my head.

"That I shall," she promised, plying her long toes with abandon.

We had come into the orchard and there discerned Isaac sprawled beneath the drooping boughs of an apple tree, which ought to have been plucked and trimmed. His scrawny body seemed scarcely larger than when I'd found him by the bridge to Colsterworth, measuring the going of the sun with a shadow-stick, but his legs, thrust out in a vee, were perceptibly longer. At first, I could see only the top of his head, for he was clearly absorbed in a book, but as I drew closer it appeared someone had patched his ill-fitting jacket and mended his boots.

I put down Dolly Plimpton and took her by the hand as I advanced, she drawing back and peering wide-eyed round my waist. When his head came up, I detected that he had not been reading, but weeping, as was his custom in those days.

"Go away," he growled.

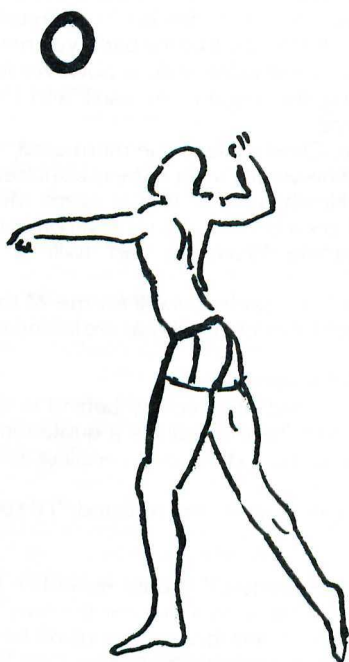
"I perceive you're mourning Father Barnabas," I observed.

"The Lord is coming for the fiend at last," he choked.

"Does it not rejoice you to know your mother will be coming home?"

"'Tis the occasion for my weeping. She'll not be alone."

"Ah, but Woolsthorpe will soon ring with childish laughter."



"Not mine, Christopher," he sulked, looking askance at the clocked stockings dangling from my head. "On furlough for the rutting season, are you?"

It would seem I'd overestimated his innocence. Earthy considerations had invaded his great head, along with his dreams, whilst I was awash in Dutch blood at the Texel.

"I've been let out for the fall plowing," I responded cheerfully, "and till now had found nought to plow."

Dolly Plimpton looked down modestly, but darted behind me with a little cry when he scowled at her.

"I shall inform Grannie Ayscough of this dalliance, Plimpton," he asserted self-righteously.

"That, you will not," I challenged him. "Would you have it out that you pinched Doll's bottom in the woodshed?"

His eyes widened.

"'Twas only to determine how much of't was really Plimpton."

"And you found out?"

"Yes. 'Twas all Plimpton."

"She had invited your advances?"

"No. She doesn't like me. None of the servants do."

"When she cried, you quoted her a passage from the Bible?"

"Yes, I told her 'twas blessed to turn the other cheek," he acknowledged sullenly. "'Twas no more than an innocent experiment in anatomy."

I guffawed.

"Shall we have an end to your threats, then?"

"Yes," he agreed.

The pretty lass was bounding up and down with glee, to find herself thus reprieved.

"'Twas really all me, m'lord," she chirped, hurling herself to the ground between us. "The pinch marks are still there. Wouldst see 'em?"

"I'm reading a book," said Isaac.

"I'll look into 'em later," I promised.

"'Tis about a machine," he went on, "which can fly free of the earth's Gravity, become weightless in space, and ultimately land on the moon. The author's powers of invention are extraordinary!"

He yearned up at the celestial crescent, yet visible in the cloudless sky, and seemed not to notice when I snatched the book from his hand. The title page was brittle, for it was not new: *The Discovery of the New World in the Moon*, wrote by one Wilkins and printed in the year of my birth. It was a palpable stroke of fantasy I'd passed him for entertainment when I entered the Navy.²

"You've had two years to read it, m'lord," I chastened him. "Do you just get round to't now?"

"I've been through't many times, Christopher," he replied. "'Tis filled with knowing observations on the outward reach of the earth's Gravity."

"'Tis filled with poppycock!" I snorted. "A child knows such a machine cannot be built, let alone thrown to the moon."

He frowned.

"Very little is known of the Gravity, Christopher," he admonished me. "'Tis the commonest thing about us, day and night, and unlike light, 'tis undiminished in the darkness."

Dolly Plimpton had crept into my lap and lay looking up beguilingly, her bright curls tumbling over my thighs.

"Shall we be long, Christopher?" she whispered, plucking at my blouse.

"Your time will come, Doll," I stayed her. "We must first help Master Newton plan his voyage to the moon."

An apple thudded to the ground beside us, and I tossed it idly away.

"You see't!" cried Isaac, delighted. "'Tis all about us!—Here's another, Christopher. How far can you throw't?"

I accepted his challenge, lifted Doll gently aside and jumped to my feet. My head struck a branch, and a cascade of apples ensued.

"All things respond to the Gravity," mused Isaac, concealing a smile. "'Tis known since the beginning of time."

His eyes still sought the moon, but not mine. My hair and Doll's stockings were caught fast in a snarl of twigs, and I struggled to set myself free.

"Absalom, you're caught fast!" snickered Isaac.

Enraged, I tore the branch out of the tree and disentangled myself at the cost of some quantity of hair, then hurled the apple so far it disappeared over the hedge to the common.

Isaac whistled admiringly.

"'Tis further by far than I could've done," he allowed.

"Aye. 'Tis halfway to Rutland by now," said I, with a shrug, falling back to recapture Dolly Plimpton.

"But suppose," said he, with a gleam, "yon hedge were the edge of the earth."

"Suppose it were."

"The apple would fall forever, for there'd be nothing to stop it."

I was drawing Doll's hair through my fingers, and fast losing patience with his childish fancy.

"Now, that is sheer nonsense," I grumbled. "Everything stops in time."

"Only if there's something to stop it," he insisted. "The moon does not stop, Christopher."

"'Tis well for us it does not, m'lord," I breathed. "'Twould occasion a crash audible for miles, I dare say."

"Yet it falls e'er toward the center of the earth," he declared.

"Like the apples!" cried Doll, clapping her hands.

I was becoming uneasy.

"Why do you say that?" I protested. "'Tis falling round us, not into us."

"The very fact that it abides the centuries in our vicinity attests the earth has a hold on't."

"Then why does't not turn into us, like the apple?"

"It possesses an inward impetus which has nothing to stop it," he surmised, "and only the Gravity to vie with. So't flies in a circle. Without the Gravity, Christopher, 'twere lost amongst the stars long ago."

"But Wilkins contends 'tis so far away as to be outside the reach of our Gravity."

"Uncle Billy Ayscough says we have from Bullialdi that the pull is mightily diminished by the distance from the earth's center."³

In spite of myself, and Doll's curls, I was intrigued by his speculation.

"You may be on to something, m'lord," I acknowledged. "Did I let loose an apple on the moon, I suppose 'twould soon find its way to the earth."

"I should think not, Christopher. 'Twould partake of the Gravity of the moon, due to its proximity, and fall thereon."

I balked.

"The Gravity shows partiality, then?"

"It must draw in both directions, though I can't imagine how. Like a river flowing two ways at once. Have you not perceived at sea that the tides follow the moon about the earth?"

"On the contrary," I objected, "There's a high tide every day, when the moon is out of sight."

He was clearly puzzled.

"I agree 'tis an obscure question, Christopher. It must be pulling from the other side."

"Then tell me, m'lord, what **is** this invisible power that pulls hither and yon at the same time, at immense distance?"

"I'm thinking on't," he assured me, as though he expected the answer to pop into his head at any moment. "I intend to find the numbers to describe its operation."

"And they will explicate what it is?"

"We know what it is, as we know God, by the feel of't."

Doll had got my blouse open and was passing her lips across my belly. Her winsome exhortation was no longer to be denied.

"'Tis time we left you to your book, m'lord," I apologized. "Doll says she's something to show me, and I'm o'ercome by curiosity."

"Put the haymow in order when you leave, Christopher," he bade me, with a wistful smile.

"One thing more," said I, getting up cautiously, chary of the branches. "Can you tell me who threw the moon, m'lord?"

"'Twas done long ago," he brooded, "when none was about to see."

"And?"

"I fancy 'twas Almighty God."

That was enough for me. I swung Dolly Plimpton to my shoulder again.

"'Tis the answer of a simpleton," I scoffed. "'Tis 1653, m'lord, and modern times. In a hundred years, your God will be sleeping with Juno!"

His glare bespoke bale.

"There be some of us in the Church of England, Christopher, who apprehend His Dominion to be eternal as the Gravity. My mother . . ."

He broke off at a shriek from the manor house, whereupon the chambermaid came pelting forth full tilt. At first, her cries were indistinguishable, but as she closed us, running side to side as women do, her arms flying like semaphors, we began to make out the signal.

"Mast R'Isaac! Mast R'Issac! 'Tis m'lady, 'ere mum! She'll have 'e at once!"

The wench stumbled and caught her breath.

"Dolly, cook wants 'e in kitchen to stuff and baste t' birds. We're to feast t' mourners beforehand, that we may avoid 'em after. — Mast R'Isaac, madam will have 'e dressed proper for funeral!"

"I'll not," said Isaac, closing his book with a snap. "Cannot the old villain let her come to me as I am, e'en in death?"

Dolly Plimpton got both hands in my hair and tugged imperatively.

"We must hurry, Christopher!" she squealed. "Cross yonder to the haymow and save a step!"

Her breath came faster, and her toes pointed cunningly.

"'Tis a happy outlook we leave to you, Master Isaac!" she called back, as I loped through the trees. "You'll have a brother and two sisters to play at your knee!"

"I shall run away with Christopher!" he shouted. "We shall go to sea and study the moon!"

¹Cannon apparently served without distinction in the first war with the Dutch, over the Navigation Act, when Dutch bottoms were excluded from English ports. Maarten Van Tromp, a Dutch admiral, was killed at the Texel, 31 July 1653.

²Apart from Cannon's account, there is no positive evidence that Newton ever saw this remarkable book by Dr. John Wilkins of Oxford (1636), although he was familiar with the same writer's *Mathematicall Magick*.

³Ismael Bouilliau (also Bullialdi), (1605-1694), French astronomer, gave the inverse square relation in his *Astronomia Philolaica* (Paris, 1645.)