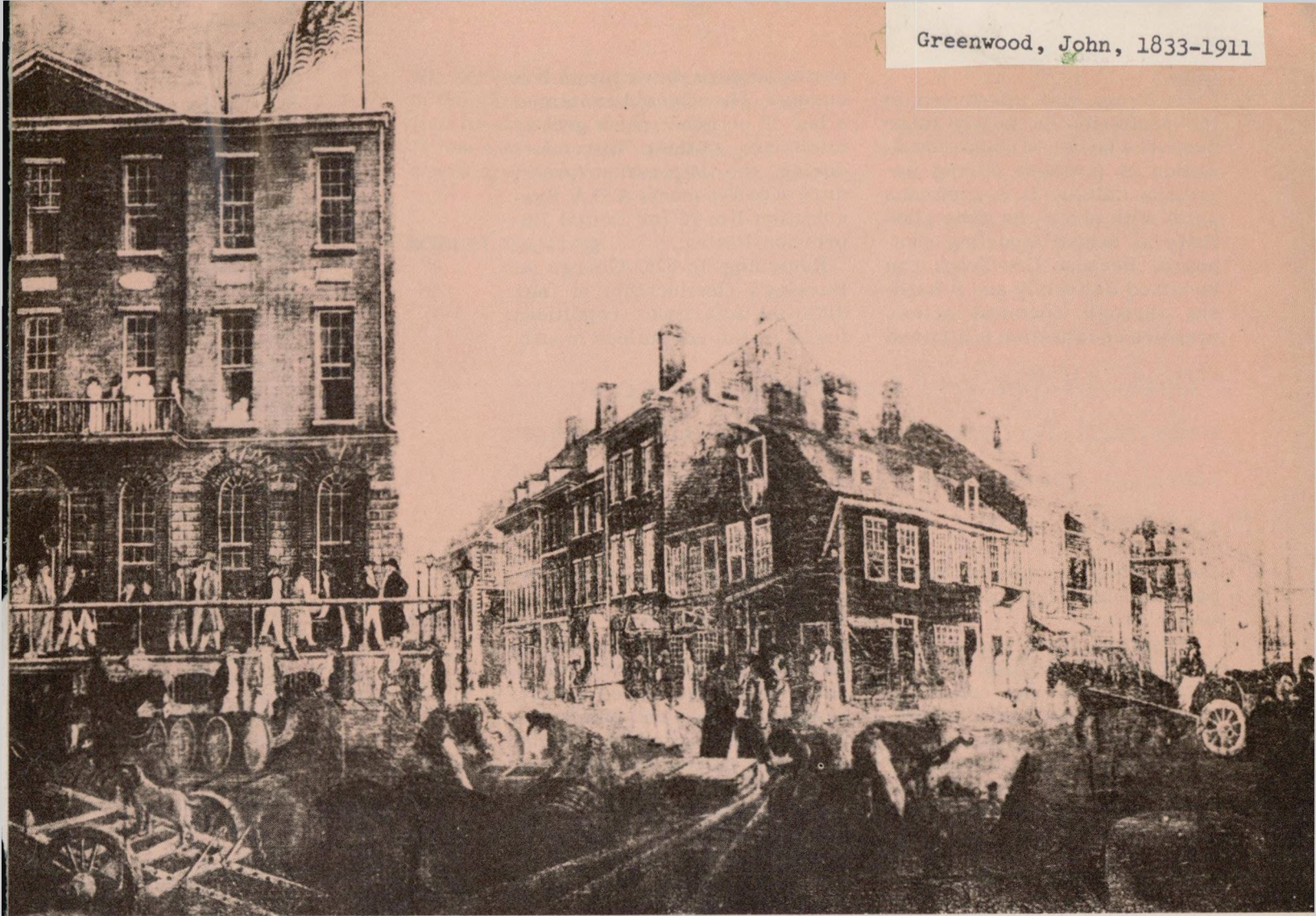




TO THOSE ACQUAINTED with medical history, it is common knowledge that John Greenwood, apart from his having so esteemed a patient as the first President of the United States, was also an original and inventive mind in the field of dental machinery and techniques. To his credit are attributed the first power foot drill, the spiral springs which held artificial teeth in position, and it is also assumed that he was the first American dentist to have used porcelain in the manufacture of teeth.

What is not common knowledge, however, is the astounding adventurous life Greenwood led before taking up the profession of dentistry. Fifer-boy, fifer-major, and soldier in the Revolu-

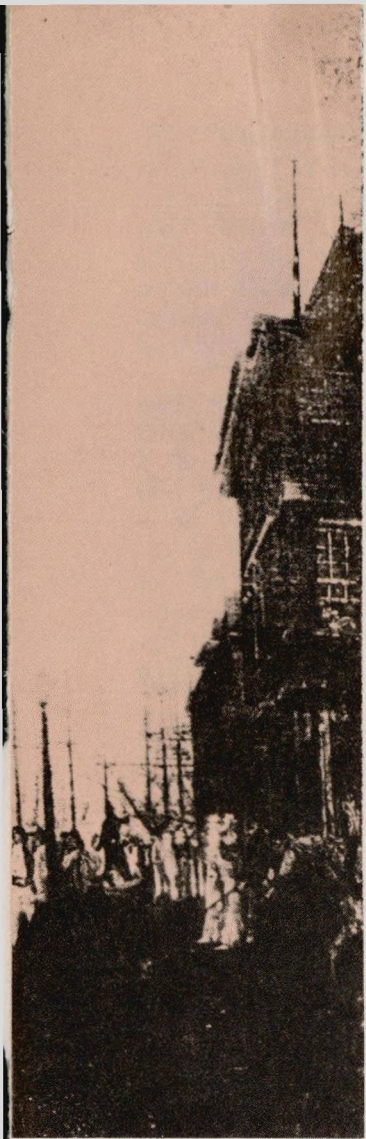
tionary Army; then scouting for Benedict Arnold's forces in Canada, privateer, and finally captain of his own schooner sailing the Caribbean—all this as if taken out of a novel by Robert Louis Stevenson.

Greenwood was born in Boston, Massachusetts on May 17, 1760, and was a direct descendant of one Miles Greenwood, a lieutenant and chaplain in Cromwell's army. His parents were Isaac and Mary (Fane) Greenwood. Of his mother's family, very little is really known. The information on his paternal side is more complete and shows a family of highly intelligent, well educated people whose bent veered to the philosophical and scientific fields.

Greenwood's grandfather,

Isaac Greenwood, held the chair of Professor of Mathematics at Harvard College and authored several books on mathematics and metaphysics. His dather, who was also named Isaac, though primarily an ivory turner and mathematical instrument maker, was one of the first men in Boston to begin the practice of dentistry. As a matter of fact, according to his son, the elder Greenwood and his friend, the goldsmith Paul Revere "they both learnt the method from John Baker," a London surgeon dentist who visited Boston and New York in 1768.

Information about Greenwood's boyhood is very sketchy. He attended the North Writing School, located at the corner of North Bennet and Love Lane in



No. 199 Water Street, northeast corner
of Wall Street, where John Greenwood
first lived in New York, in 1783.
(From a painting by Francis Guy,
courtesy of The New York Historical Society)

ROBERT CANTOR

John Greenwood

Soldier, Privateer, Dentist

*Here are facts about the exciting life
of the first President's dentist*

Boston until he was 13 years old, at which time he was apprenticed to his uncle, Thales Greenwood, a cabinet maker living at Falmouth, Maine.

Aside from learning to play the fife at the age of nine (an instrument which he continued to play the rest of his life), Greenwood learned very little at school except, as he put it "being thumped in," and he added understandingly, "There were only two masters who had to overlook and manage 300 to 400 boys."

It was during his stay with his uncle that the Revolutionary War broke. Thales, a fervent patriot, closed up his shop and enlisted in the ragtail of the colonies. Not to be outdone, the 15 year old John entered the army

as a fifer-boy. A short time later, he received news of the Battle of Concord, and decided to visit his parents in Boston, 150 miles away. Without waiting for the army's permission, he left on a Sunday morning, "when in New England all is still and no persons are in the streets, having eaten my breakfast and took a handkerchief and tied up 3 shirts, a pair or two of stockings and 4½ pistareens (a small Spanish coin used in the colonies), I jumped over the fence in the backyard and set off."

After almost five days of traveling, during which time he paid his expenses of room and board by playing his fife at taverns where there was a muster, he reached Cambridge. But in his attempt to cross over into the

city of Boston, he was thwarted by a well disciplined American sentry. Disappointed by this turn of events, and urged on by a friend whom he had met in Cambridge, he again enlisted as a fifer-boy in the colonial forces, in a company under the command of one Captain Bliss.

An amusing incident occurred at this time. Greenwood's mother had got word of her son's whereabouts and had applied for permission from the British forces to cross their lines in order to visit her son. She got the permission, crossed the lines, and saw her son. But when she tried to get back to Boston, the Americans refused to let her cross their lines. She remained an involuntary refugee for six weeks until General Washington,

JOHN GREENWOOD

continued

Business card of Dr. John Greenwood, 199 Water Street, New York, about 1787

I. GREENWOOD,
SURGEON DENTIST,

PRESERVES the Teeth and Gums, by removing an infectious Tumor that collects round the Neck of the Teeth, preventing the Gums from adhering to them, and, if not separated and cleaned, will bring them from the Gums, and cause them to grow loose and drop out. This Tumor is scaled off without causing the least Pain; and the blackest Teeth made firm and white.

Draws TEETH and STUMPS.

ARTIFICIAL TEETH set in so firm (without drawing Stumps or causing the least Pain) as to eat with them, and so exact as not to be distinguished from Natural. They are not to be taken out by Night, as is by some falsely suggested, but may be worn Year together. They give a youthful Air to the Countenance, and render Pronunciation more agreeable and distinct. In a Word, both Natural and Artificial are of such real Service as to be worthy the Attention of every one.

Said **GREENWOOD** has a Tincture that preserves, and prevents the further Decay of, the Teeth and Gums, with Directions, at Four shilling per Phial, which he will warrant, if properly applied.

N. B. His PRICES are low, to give every Person an Opportunity to be benefited by him. — attends abroad, on sending Directions to No. 199, WATER-STREET, opposite the Coffee-House, New-York.

to whom she had applied personally, gave orders that she be allowed to cross the lines and get home. Her parting words to her son were, "Well, Johnny, I am at last to see your father, thank God. I hope you will behave like a soldier, and who knows but what you may be a general."

Two or three days after the British had left Bunker Hill, but before they had left Boston, Greenwood's regiment, numbering 500 men, was ordered to New York City. Three weeks later, after having provisioned themselves, they sailed, on April 21, 1776, for Canada.

They proceeded up the Hudson River to Albany, and then on to Ticonderoga. From there they sailed to St. John by way of Lake Champlain. Disembarking, they

marched to LaPrairie and then crossed over to Montreal to join the forces led by Benedict Arnold, who had not yet become a traitor, and was at this time one of the outstanding generals of the Revolutionary Army.

Shortly after the arrival of Greenwood's regiment, word came through that a large American force had been routed by 1300 Indian allies of the British. Arnold, wanting to make sure that the report was not exaggerated, sent Greenwood and a British deserter to scout the scene of the battle and determine the validity of the report.

Greenwood and his companion, after some hard sludging through the rain-soaked forest, finally came across a grisly scene of death and destruction. It left no doubt in his mind that the American forces had suffered a serious defeat. Following hard on the track of the Indians, it took only a short while for the two scouts to catch up with them. From a distance, Greenwood was able to see the enemy. But he saw even a stranger sight. Stark naked American troopers, cut, bruised, battered, and numbed with shock, were being herded in the van of the Indian forces to be used as a shield in the event of an attack.

Realizing that the Indians were heading in the direction of Arnold's camp, Greenwood and the other scout took off on another route and arrived at the camp before them. He reported his findings to Arnold who, realizing that he was in a precarious position, prepared for a retreat.

Harassed by the constantly attacking British forces, the American forces embarked in open boats to Ticonderoga. The men were sick from all sorts of ailments . . . "smallpox, fever, typhoid," and Greenwood, himself, suffered from "ague, fever, . . . cuts and bruises." "Out of the 500 men going to Canada," Greenwood states, "only 100 returned."

Arriving in Albany from Ti-

conderoga, Greenwood's regiment was ordered to Trenton for an attack against the Hessian mercenaries of the British. That battle, fortunately for him, was short lived. The Hessian forces, after a few threatening volleys by the Americans, surrendered "most easily."

On December 27, 1776, two days more than his enlisted time, Greenwood received 3 months mustering out pay, and was offered \$26 to stay on 6 weeks longer. This offer he refused. As he put it, "I did not enlist for the purpose of remaining in the army, but out of necessity, since I could not reach my father's house in Boston."

With another fifer-boy, Leonard Parks, Greenwood set out for Boston. Between them they had \$57. On the way they came across Greenwood's old commander, Captain Bliss, who had just been released from a Canadian prison. Bliss was astride an old, decrepit nag on his way to Philadelphia. At the sight of the old horse, Greenwood's spirits rose. He convinced Captain Bliss, who had only a short distance to go, to sell him the horse on the basis of their old friendship. After a little haggling, the deal was consummated for \$11.

Since the animal was in no condition to carry two riders at one time, the two boys worked out a plan whereby one of them would ride it for several miles while the other went on foot. The rider, after traveling his allotted distance, would then tie the horse to a tree and continue on foot while his companion would catch up with the horse, mount it and ride on. In this staggered manner, they managed to reach the North River in New York State. But their good luck was only momentary. A ferry which they had boarded on the North River ran into large cakes of ice floating down the river and, in order to save themselves, they were forced to leave their horse behind. The rest of the way to Boston they made on foot.

Greenwood stayed with his

parents recuperating from his various ordeals. During this time, however, a strong urge to go to sea possessed him. Finally, bored with his self-imposed inactivity, he shipped out as a steward's mate on the CUMBERLAND, a privateer ship of 18 six-pounders. The CUMBERLAND, with a crew of 130, was commanded by Commodore Manly.

It was Manly's intention to cruise off the Island of Barbadoes and intercept the outgoing merchantmen of the British West Indian Fleet. Unfortunately for Greenwood and the rest of the crew, a British frigate, the POMONA, armed with 36 — nine and twelve pounders, and carrying a compliment of 300 men, met them first and proceeded to give chase.

With the CUMBERLAND'S flag waving sprightly in the breeze, Manly tried to evade the bigger ship but to no avail. The huge guns of the POMONA thundered across the bow of the CUMBERLAND and threatened at any moment to turn the smaller vessel into a mass of splintered wood. Faced with this hopeless situation, Manly ordered the CUMBERLAND'S flag lowered and the flag of surrender raised.

At that time in history the flags of the privateers had no national emblem. Greenwood described the CUMBERLAND'S flag as "a very large white flag with a pine tree, painted green. Under the tree a black snake wound into 13 coils and cut into 13 pieces (representing the Colonies), and under that the motto written in black letters "JOIN OR DIE."

The crew of the CUMBERLAND, realizing that the boarding of their vessel was imminent, raided the ship's cargo, a cargo which they had previously taken as a prize from a foundering British ship. Two items which they latched onto with great alacrity were whiskey and British uniforms. The first they put down with great gusto; the second, they put on hoping, they believed in their drunken stupor,

to deceive the British as to their nationality.

The boarding British sailors quickly erased that hope. They threw the CUMBERLAND'S crew of 130, Greenwood among them, into the lower hold "jammed one on top of the other in the hot, damp West Indian climate." For meals, Greenwood continued, "We were served pale pea soup and crackers." As if this were not sufficient punishment, when they landed in the Barbadoes on January 1, 1779, (a fine way to celebrate the New Year), the British permitted, and urged on, their negro slaves to throw stones at them.

"We were conducted to a prison with high walls," wrote an older Greenwood, who at the time of his incarceration was only 19 years old. "In the day, we sat in the yard under a boiling sun . . . at night we were sent down into a dungeon which consisted of 3 apartments connected with one another . . . from the constant rain, the floors were of mud."

Pressed for seamen, the British selected 60 men from the crew of the CUMBERLAND, Greenwood being one of them, to serve on the man-of-wars. In order to avoid this impressment, Greenwood convinced the CUMBERLAND'S doctor, who had been allowed to keep his medicine chest, to give him huge doses of emetics. Needless to say, the effects of this medica-

tion served their purpose.

After five months of confinement, a vessel arrived from Martinique for the release of the remaining members of the crew, and they were conducted aboard and landed at Port St. Pierre.

Since he was so fond of music, Greenwood was fond of relating how he learned one of his favorites, from an old Jewish prisoner, while he spent time in the dungeon. It was sung to the air of the Countess of Coventry, and the first verse went:

*This world my dear Myra
is full of deceit
And Friendship's a jewel
we seldom can meet;
How strange does it seem
when in looking around,
That the source of content
is so scarce to be found"*

After a short stay in Port St. Pierre, Greenwood got passage on a ship sailing to Piscataway, 60 miles from Boston and in the vicinity of Portsmouth, New Hampshire. Here he boarded a vessel commanded by a Captain Roach whom he described as "big a villain as ever I saw, and I have had an opportunity of seeing many . . . the ship had bad pumps, bad food, bad treatment, and yellow fever."

No sooner had the ship left port than it was spied by a privateer sloop. Though Roach's vessel had port holes for guns, it had no guns. This is where Greenwood's mechanical ability stood him in good stead, as it so



John Greenwood, 1760-1819



often did in his later life as a dentist.

He quickly made 5 or 6 wooden guns, opened the ports and fastened them on the inside. From the distance, they had the look of the real thing. In order to make the deception even more convincing, he got hold of some dirty blankets and, with the aid of handspikes, fashioned them in such a manner as to make it appear that the ship was crewed by a considerable number of men. Evidently this makeshift ruse worked, for in no time at all the enemy sloop had sailed off.

In Boston, Greenwood thankfully took his leave of the Captain. But his stay in that city did not last very long. In swift succession, he found service on a number of vessels. Under Captain D. Porter, he sailed on the TARTAR as master-at-arms. This ship cruised around Jamaica for about 6 months. To confuse the British as to her origin, Captain Porter had the crew constantly repainting her hull — now yellow, now blue, now green.

One of the many prizes taken by the TARTAR was a small schooner manned by pirates. Porter appointed Greenwood second-in-command of this ship which, after capturing over 30 prizes, was chased by a British man-of-war and wrecked off the coast of Port-au-Prince.

From Port-au-Prince, Greenwood shipped on a letter-of-marque brig, the GENERAL LINCOLN, bound for Salem. Caught by the British, the GENERAL LINCOLN, fortunately for Greenwood, was brought to New York City. Once in New York, Greenwood managed to escape. He sought out an old friend of his father's, a Mr. Turk, who had a

wood turning shop on Nassau Street. After six weeks in New York, he left for Boston. Again his stay in Boston was short-lived, for the sea still had its powerful attractions. He sailed, first, on the AURORA, and then later on the RACE HORSE, commanded by Captain N. Thayer. On this ship he was second mate.

An amusing incident occurred while Greenwood was on the RACE HORSE. An American brig had been captured by the British and put under the command of one of their officers. This gentleman, unacquainted with the waters in which he was sailing, and having but a smattering of navigational knowledge, found himself lost on the high seas. He was evidently relieved when the RACE HORSE came alongside and claimed it. Captain Thayer came aboard the captured vessel and then told Greenwood, who had accompanied him, that he, Greenwood, was the new skipper of their new prize.

After a few trips on the brig, Greenwood came across an opportunity to purchase his own vessel. Lacking the total purchase price, he formed a partnership with a friend named Myrick and bought a two-thirds interest in the schooner, Myrick taking the other third. On this schooner, Greenwood made a few trips until he was again captured by the British. This time it was a warship manned by 40 guns. On this occasion, however, he was allowed to go on his own, and came home on a British brig-of-war bound for New York.

With the conclusion of the Revolutionary War, Greenwood found, like many others, it difficult to get a job. The shipping

industry had a surfeit of men and a dearth of jobs. Around 1784, Greenwood opened an ivory turning and mathematical instrument making shop, skills which he had learned from his father, and began the practice of dentistry as a side-line. The last mentioned profession he had also learned from his father. His shop and dental practice were located at No. 199 Water Street in New York City. Business got so good that he found himself urging his two brothers, William Pitt and Clark, to join. When they arrived, he turned over the ivory turning and instrument making portion of the business to them and concentrated on his dental practice.

In 1785, he issued a handbill advertising his dental practice, and on February 28, 1786, he advertised in the Daily Advertiser that he was "located at No. 199 Water Street, which is opposite Bradford's Coffee House (no. 200). This coffee house was famous as a meeting place for the Liberty Boys during the war.

In July of 1791, he moved to No. 5 Vesey Street. While at this address, he advertised the following in the *New York Weekly Museum* of July 28, 1791:

"John Greenwood, Surgeon Dentist and Operator for the Teeth, has removed to No. 5 Vesey Street, side of St. Pauls Church. Whose abilities are universally approved by seven years practice in this city. He transplants, makes and cleans teeth as usual. Price as follows:

Transplants teeth — 3 guineas each; Grafts natural teeth — 3 dollars; Makes and fixes artificial teeth — 8 to 20s each; Cleans teeth — from 8 to 20s. He has a peculiar method of

fixing artificial teeth, which are not equalled by any other artificial teeth, as to beauty, firmness or durability.

Tooth powder — 2/6 per box.

At a later date, June, 1792, he advertised a new invention to fix "artificial teeth with springs" and in such a manner that they may be "put in and taken out by the person wearing them with ease and in a moment." He continued, "They save the trouble of tying them and cannot be perceived as to their appearance or fastening from natural teeth."

In an advertisement of November, 1792, he states that he "transplants and grafts natural teeth. These grow as firm in the jaw as the original teeth . . . fixes artificial teeth of a peculiar kind of enamel of which is as beautiful as that of human teeth." This, evidently, was the porcelain teeth which he allegedly introduced into the United States.

Always open to new ideas and new techniques in the development of his professional skills, Greenwood went to France to study the latest European dental practices. On his return to this country, he advertised the great improvements in methods and apparatus.

One of Greenwood's grandsons relates that he heard his grandfather mention the name of a fellow passenger on his return trip from France, Robert Fulton, the inventor of the steamboat. According to some sources, Fulton showed Greenwood his plans of the first model steamboat and accepted the latter's advice concerning a change of position of the paddles.

Greenwood, who had married Elizabeth Weaver on March 22, 1788, and had had seven children by her, died November 16, 1819, at the age of 60. There are some people who attribute his death to the rigors he suffered on behalf of his country's independence and to the almost superhuman effort he expended in the development of his chosen profession. This may be so since his mother

lived till she was over 90 years old, and his father seemed to reach a ripe old age.

Whatever the cause, or causes, of his death may have been, it is to the living Greenwood, whose

life was so full, that President Washington, in his letter of January 6, 1799, wrote, "I shall always prefer your services to any other in the line of your present profession."

Problem of the Month

The Case of the Sneezing Patient

Address your reply to D.A. Problem Editors
CAL MAGAZINE, 3737 West 127th Street
Chicago, Illinois 60658

"This is one for the book," writes Dolly Dee (Canada). "One of our patients, a woman who weighs at least 250 pounds, claims she is allergic to ME because I have bright red hair. Can this be true? Anyway, as soon as I stepped into the operatory she began to sneeze violently, and believe me she blew all the instruments right off the bracket! So Doctor banned ME for the duration of the appointment! So I went out and stood in the corridor sore as a wet hen. Then finally who should come by but the big girl herself and as soon as she saw ME she began to sneeze again, and she hurried by whooping and sneezing like mad. Doctor thought it was funny. He said he always thought I dyed my hair red but now he says he knows it is the real McCoy. What did he mean? Nobody ever sneezed at me before. Am I being kidded?"

Well, we don't blame Dolly Ree for being sensitive about her pretty red hair. Maybe some other red-headed D.A.'s will sympathize with her. Maybe, they've been sneezed at too. So please write — besides, there are awards of \$10.00 and \$5.00 respectively for the two best letters selected by the CAL judges. Just be sure to mail your letter before June 30, 1970. Patients are funny, aren't they?

Solution to the Problem of the Month

The Case of the Purloined Denture

\$10.00 award — Toby Lee Johnson, D.A. to Calvin M. Johnson, D.D.S., Deerfield Beach, Florida 33441

"Dear Marian C.: Compose a letter in your office and with the help of the patient whose denture is in question, tell Grandma how miserable she is without her denture, and she thanks Grandma for teaching her a lesson. Now she realizes how wonderful that new lower is and how she misses it. Grandma will appreciate this feeling. Also plead with Grandma to wrap up the denture and mail or bring it in for a happy thank you. Tell her how poor the patient is — that she can't afford another denture — that she is losing weight and is a social outcast without teeth! Grandma sounds senile to me, but I believe this type of letter will move her emotions and produce the missing lower. I hope I've helped."

\$5.00 award — Dorothea D. Nelson, D.A. to Thomas Carpenter, D.D.S., Sylvania, Ohio 43560

"Dear Marian C.: I am inclined to the direct approach. Send Grandma the bill. Notation: 'All denture work payable in 30 days or Court Action will be taken. Alternative — return denture and account will be closed.'"