RS. JACKIE METCALF, a 22-year-old Torrance, California, housewife, mounted the steps of a white one-story building on LaBrea Avenue in Los Angeles and entered a door marked "Dr. Ruth B. Drown, Chiropractor." Inside she gave three small pieces of blotting paper to Doctor Drown and her daughter, Dr. Cynthia Chatfield, also a chiropractor. The stains on the blotters, Mrs. Metcalf said, were samples of blood from her three children. She asked to have her children's ills diagnosed from the blood samples and paid \$50 for each diagnosis. The date was May 23, 1963.

In a few days she heard from Doctor Chatfield that analysis of the blood samples showed the youngsters to be coming down with chicken pox and mumps. On an earlier visit Mrs. Metcalf had purchased from Doctor Chatfield a "little black box"—a \$588 Drown Therapeutic Instrument—to treat herself and her family at home. Doctor Chatfield told her how to set the dials on the machine to cure the

children.

Mrs. Metcalf, however, was not just another patient—she was an undercover agent for the California State Department of Public Health. Her three children were not ill. And the blood samples she gave to Doctors Drown and Chatfield were not her children's blood

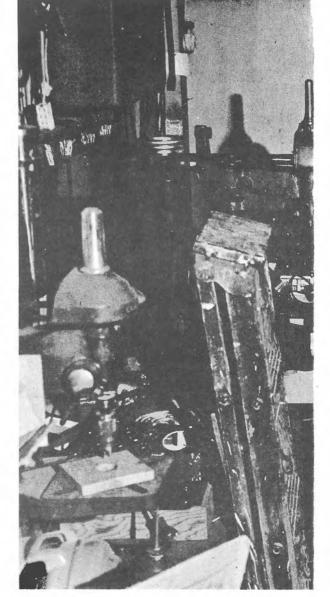
-they were the blood of a turkey, a sheep, and a pig.

On the basis of Mrs. Metcalf's experience and other evidence, Los Angeles deputy district attorney John W. Miner and a squad of police and public health inspectors swooped down on the LaBrea Avenue building, arrested Doctors Drown and Chatfield and an assistant, Mrs. Margaret Lunness, and took into custody enough Alice-in-Wonderland machines to fill a wing of the Smithsonian Institution. Doctor Drown died in 1965 while awaiting trial. Doctor Chatfield and Mrs. Lunness were convicted of grand theft for their part of the operation and in 1967 were sentenced—Mrs. Lunness being placed on probation for three years and Doctor Chatfield receiving an indeterminate prison term. They are appealing the conviction.

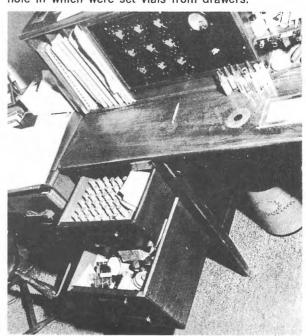
The case is a vivid reminder that pseudo-scientific health quackery is still a major activity in the United States. At the time of their



Adjudged "no more valid than voodoo or witchcraft," this elaborate hoax nevertheless gulled 35,000 residents of modern America—proof that pseudo-scientific quackery still has little trouble finding victims.



Wires led from patient to ammeter next to dials of Drown Diagnostic Machine. Operator rubbed finger on pad (right) beside hole in which were set vials from drawers.

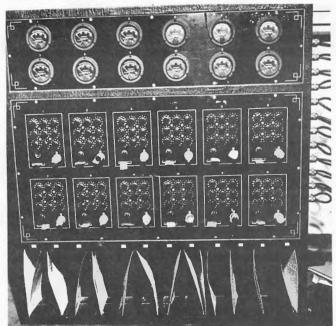


by RALPH LEE SMITH

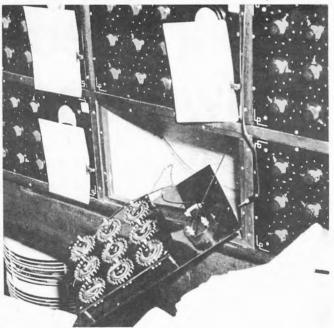


In this workshop beneath Drown Laboratories, Drown Diagnostic and Therapeutic Machines were assembled and repaired.

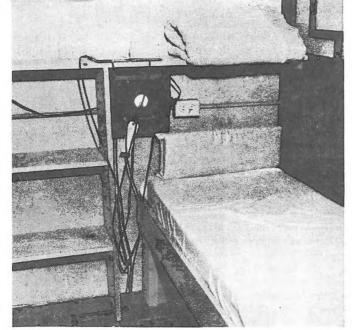
Patients anywhere in the world were "treated" remotely with this unit. Each rectangle contains tiny slip of paper with dried blood of a patient, and dials set to his "rate."



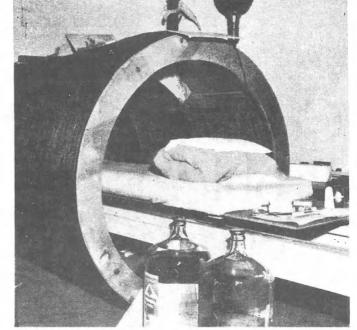
Opened unit of Drown Therapeutic Machine shows only two wires leading from the complicated contraption to the patient—who simply completed circuit, activating ammeter.



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Patients reclined on this couch, donned footpads and electrode hooked to Drown treatment machine in nearby room.



Another treatment device was a huge coil with an electric charge in it to "straighten up people who walk lopsided."

arrest Doctors Drown and Chatfield had treated 35,000 persons from all over the country, and had sold their devices to other fringe practitioners who had treated an unknown number of other patients. The devices allegedly could diagnose and cure nearly every known affliction from jealousy to cancer, plus a few ailments which medical science has yet to discover. Actually, expert witnesses testified that the elaborate machines that form the basis of the Drown treatment are a hoax. In finding the defendants guilty, the judge stated that the theory of the treatment is no more valid than "voodoo or witchcraft."

Ruth Drown got some of her ideas from Dr. Albert Abrams, king of 20th century gadget quacks (see To-DAY'S HEALTH for April 1966, page 20), who died in 1924 after having made millions leasing his machines and treating patients with them. According to the Abrams "theory," which he called ERA, all parts of the body vibrate and emit electrical impulses of different, ascertainable frequencies. What's more, he maintained, diseased organs emit impulses of different frequencies from healthy ones. To diagnose illness he "tuned in" the patient's blood specimen on an Abrams ERA machine, noting where abnormal vibrations were occurring and pretended to pinpoint the nature of the illness from the rate of vibration. The "cure" consisted of allegedly feeding proper vibrations into the body with another Abrams machine, thus overcoming the improper ones.

The American Medical Association's Department of Investigation has estimated that the Abrams contraptions inspired at least 50 imitations. In state and federal legal actions against such devices, experts repeatedly testified that both the machines and the theory behind them are sheer nonsense. This did not deter

Ruth Drown, who took the old master's notions and added many colorful and imaginative twists of her own.

At Drown Laboratories a patient was told to sit beside an impressive console and put his feet on two footpads made of German silver. The console had nine knobs arranged in three rows of three, and each knob had settings numbered from zero through 10. On the console panel there was also a micro-ammeter. Near the right-hand corner of the desk on which the console was mounted was a small rectangular rubber membrane clamped down by a metal frame. Next to this was a cylindrical well about an inch and a half deep.

Seated at the console, Doctor Drown placed an electrode on some portion of the patient's body, usually his abdomen. This immediately caused a movement of the needle on the ammeter. With her right middle finger, on which she wore a rubber covering, Doctor Drown then stroked the rubber membrane while making adjustments on the nine dials with her left hand. When her finger began to "stick" or squeak on the rubber, this indicated that the dial settings were beginning to approach the vibration rate of the part or organ of the body that she was supposedly testing.

Next she would open a drawer of her desk and draw forth a number of sealed glass vials, each containing a different chemical. These she would insert, unopened, into the well in the desk, one by one, while continuing to make delicate adjustments on the dials. By this means she supposedly arrived at the exact vibration rate. She would then read off the numbers at which the dials were set, beginning with the upper left dial and proceeding horizontally across the three rows to the lower right. This composite number, taken down by an assistant on a large chart, represented the vibration rate of the illness, which could be looked up in an immense "rate book." The "rate book" also (Continued)

indicated the "normal" vibration rate, to be fed back into the body to restore health. In treatment, the patient lay down in a small cubicle in the Drown Laboratories, placed his feet against footpads, and applied an electrode to the area designated by Doctor Drown. Wires led from the footpads and the electrode to a Drown treatment machine in another room, which was essentially the same as a diagnostic machine except that it had no rubber plate. The nine dials of the treatment machine were set to the numbers indicated in the rate book and the patient supposedly received healing vibrations of just the right frequency.

Another Drown treatment device was a tremendous hollow coil into which the patient, lying on a slab, was bodily inserted. "All we know about it," Doctor Drown told investigators, "is that a coil with a charge in it seems to straighten up people who walk lopsided." State officials who impounded the device at the time of the arrests promptly dubbed it "The Tunnel of Love."

If a patient wished to do so he could buy a nine-dial treatment machine for home use. After being diagnosed at the Laboratory the patient would be told, often over the phone, where to set the dials for regular treatment sessions at home.

Even this, however, was only the beginning. If a patient didn't want to bother being hooked up to a machine, either for diagnosis or treatment, either at the Laboratories or at home, he didn't need to. Doctors Drown and Chatfield kept dried specimens of each patient's blood on pieces of blotting paper. If a patient felt ill he could call Drown Laboratories, and the blood sample, instead of the patient, would be hooked up to the diagnostic machine. The blood sample supposedly remained in some kind of continuous communication with the rest of the patient's blood, wherever he might be, and thus reflected any current illness.

Treatment, like diagnosis, could also be "indirect." For \$35 a month Drown Laboratories would insert the patient's blood specimen into a treatment machine at a specified time each day, set the dials to the indicated healing rate, and broadcast an hour's worth of treatment to the patient, which would supposedly reach him anywhere on the face of the earth.

Ruth Drown also claimed that her machines could take photographs of the diseased organs of patients, wherever the patients were. She called the process "radio-vision." Several such photographs were exhibited at the trial, including one allegedly taken by a Drown machine in London showing a blood clot and cancer in a patient in Connecticut. One medical expert called it "completely unintelligible;" another said that it looked to him like a Rohrschach inkblot.

In a University of Chicago demonstration similar photos were produced merely by exposing photographic plates to light momentarily.

Doctor Drown had lots of other ideas. One of them was that jazz music was a cause of cancer. Cancer caused by jazz, she said, could be dissipated by playing such soothing tunes as Carrie Jacobs Bond's "Perfect Day."

She also said that each human body is surrounded by a magnetic field, and that people should be taught how to care for their magnetic fields properly. One of her publications, the *Drown Atlas of Radio Therapy*, says, ". . . any patient who is weak and depleted should never take shower baths and stand in the water over the drain, because the patient's magnetism is washed down with the water through the drain, leaving him depleted.

"Also, a weak patient, after having had a tub bath, should leave the tub and have someone else drain the water and clean the tub. If it is necessary to do this himself, he should leave the tub and put on a robe before starting to drain the tub. Too many people sit in the tub and drain the water while finishing the bath, and their own magnetism is sucked away through the drain pipes to the ground, leaving the patient with that much less reserve."

As early as 1949, the Drown devices had been shown completely incapable of diagnosing illness. At a University of Chicago experiment Doctor Drown was supplied with blood samples of a number of persons and asked to diagnose their conditions. In one case, after working over her dials for an hour, she announced that the patient had cancer of the left breast which had spread to the ovaries, uterus, pancreas, gall bladder, spleen, and kidney; that she was blind in her right eye; that her ovaries were not functioning properly; and that there was reduced function of various organs including the stomach, spinal nerves, and heart. Actually, the patient was suffering from tuberculosis of the upper lobe of the right lung.

In 1951 Doctor Drown was tried on federal charges of introducing a misbranded device into interstate commerce. At the trial one of the government's expert witnesses, Dr. Elmer Belt, described the Drown device as "perfectly useless." "You just do not seem to think much of the instrument, do you, Doctor Belt?" the defense attorney asked. "I couldn't even use it to amuse the children," Doctor Belt replied. Doctor Drown was found guilty by the jury and was fined \$1000. She stopped shipping her devices across state lines but otherwise carried on business as usual.

In 1966 Doctor Chatfield and Mrs. Lunness went to trial in Los Angeles on the state charges. In addition to receiving Mrs. Jackie Metcalf's firsthand account, the court heard a procession of witnesses relate astounding stories. One testified that Doctor Drown assured him that his son, a diabetic, could reduce his intake of

insulin, prescribed by a doctor, if he took the Drown treatment. Another witness, an epileptic, was told by Doctor Drown that she could cure him; she said that he would be able to stop taking the drug diphenylhydantoin prescribed by his physician, and she continued to treat him even after he had a severe seizure in her office. In another case, a chiropractor who used Drown therapy instruments on her patients brought a man to Drown Laboratories who had polyps in his lower intestinal tract. A diagnosis by Drown instruments showed no cancer, and the chiropractor therefore continued to treat the supposedly benign polyps with a Drown therapy device. The patient worsened and died. A biopsy, done by a medical doctor, had shown the growths were malignant.

A dramatic highlight of the trial was the testimony of Dr. Moses A. Greenfield, professor of radiology at the UCLA School of Medicine and a consultant to the Atomic Energy Commission. Disassembling a Drown device in open court, Doctor Greenfield explained that all it basically consisted of was a length of wire linking together two pieces of dissimilar metal-the German silver of the foot pads and the lead of the electrode. The only function performed by the patient was to complete the otherwise broken circuit. With the circuit complete, a small electric current flowed between the two metals, which registered on the ammeter on the console. The entire device therefore operated like a simple flashlight battery. It was even possible to eliminate the patient entirely. Doctor Greenfield demonstrated that the same deflection of the ammeter needle could be produced by dipping the footpad and electrode into a dish of water instead of applying them to a human body.

As for the nine dials with their 10 numbered settings, Doctor Greenfield dismounted the panel and showed that only two wires connected each dial to the circuit. Further dismantling showed that the 10 positions of each switch were connected together and it therefore made no difference on which position any of the dials were set!

The exposure of the scientific fraud brought some moments of amusement to the courtroom. But behind it lay an epic example of heartlessness, cruelty, and indifference to human life. "Quackery can kill," said deputy district attorney John Miner in his summary, "and the use of fraudulent instruments such as these devices in the courtroom is dangerous to human life." The Drown-Chatfield scheme, which treated thousands of patients and took in immense sums of money for years after its worthlessness had been demonstrated in the Chicago experiments and the federal trial, demonstrates that the nation is still far from solving one of its gravest social problems -the menace of health fraud.