

Russian Doctors Far Advanced

A pistol-like machine that ingeniously uses tiny metal staples instead of thread to close surgical wounds.

A miniature sleep machine that uses electricity to nudge patients into unconsciousness.

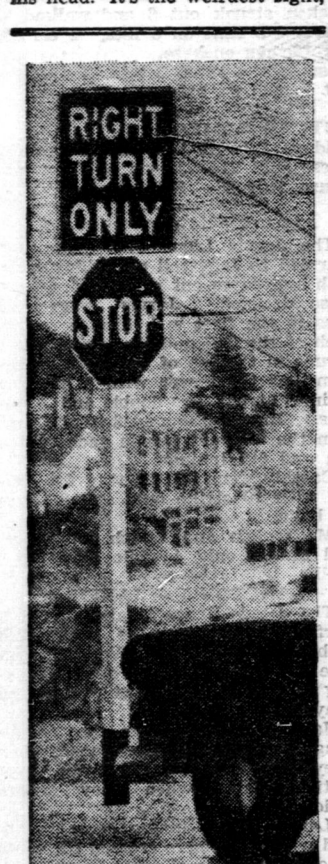
A surgical camera that takes color pictures of a patient's insides.

These and other advanced scientific instruments are products of the growing ingenuity of Russian medicine, may soon be manufactured in the United States. The Rand Development Corp. of Cleveland announced last month that it has paid \$50,000 for a nine-month option to buy the designs of these and thirteen other kinds of Russian instruments.

"If American surgeons think that these instruments are as good as they look," Rand's energetic president, H. James Rand, said recently after a visit to the Soviet Union, "we will pay \$50,000 for the blueprints." (After that, Rand says he will "rent" the rights from the Soviets for \$50,000 a year for ten years, and in turn will license these rights to American manufacturers.)

U.S. surgeons will get a chance to examine the instruments next September, when a Russian surgeon and a technician will begin a three-month demonstration tour of American medical schools, performing operations on animals. Many of the instruments—like the surgical camera—are simply refinements on American devices. Both the suturing and the sleep machines, however, are radical departures.

How does the Russian sleep machine work? Rand, who himself has been put to sleep by it, explained: "This isn't shock therapy. There are no muscular contractions. Instead, a small amount of electric current is pulsed into the brain to suppress certain wave patterns. In from a few seconds to twenty minutes, the patient falls asleep, and only intense pain will wake him while the electrodes are fastened to his head. It's the weirdest sight,



SECOND-THOUGHT DEPT. — The "stop" is much better information than the "right turn only" on this street sign in the Twin Peaks area of San Francisco. Anyone turning right would wind up atop houses directly below and beside road.

to see sixteen patients in a Russian mental ward all wired up and fast asleep."

The sleep machine comes in a large model which treats sixteen patients at once, and a smaller, one-patient model which looks like (and will cost about as much as) a transistor pocket radio. Besides quieting mental patients, Rand said, it may be used to soothe surgical patients under local anesthetics just before and after surgery.

The suturing machine, Rand said, has been used in Russia with dramatic effect. Its speed and accuracy have been among its advantages which have enabled Soviet surgeons to perform such daring operations as the grafting of a puppy's head on the neck of a full-grown dog.

"The Russians showed us motion pictures of a woman whose hand was caught in a punch press," Rand reported last week. "They amputated the hand, rinsed out all the blood clots in a heart-lung machine, refrigerated it, and then stapled it on. The woman, they told me, now plays the piano."

The stapler comes in 40 different sizes and models, for such highly different organs as the blood vessels, nerves, lungs, and stomach, and was developed by the Russians during the war, according to Rand, because of shortage of military surgeons. "Now, once an engineer has prepared the machine—and it takes about half an hour to do this—all the surgeon need do is push a button. This gives even a mediocre surgeon a gifted hand."

In major stomach operations, Rand said, the stapler reduces the sewing time from about two hours to twenty minutes, and an added advantage is that the metal staples do not irritate tissues as thread sometimes does.

To Rand, who took along a prominent U.S. doctor on each of his three trips to Russia, these surgical instruments are a result of "the tremendous amount of men and money the Russians put on a project. At the Institute for Surgical Instruments in Moscow, they have 400 experts, many of them both surgeons and engineers. In manpower, this would be equivalent here to an investment of about \$15 million. When you put that amount of money into a problem, you are likely to come up with a solution."

Research plots are being set up at the annual meeting of the Klondike Gardens Co-operative Limited, which was started in 1954 with 25 original members who purchased shares at \$100.00 each. Additional financing was provided by a Federal Government grant of one-third of the approved cost of the building of 50% repayable over a twenty-year period.

Membership has climbed from the original 25 to 49 at present. Sales volume has increased from \$222,000 in 1954 to \$424,000 in 1958. Crops handled are onions, potatoes, lettuce, carrots, celery, turnips, radishes, cabbage, cauliflower and a few other products to a small extent, states a writer in *The Grower*.

The market area for the Co-operative is primarily in the London, Windsor, Stratford, Hamilton, Toronto areas but shipments have gone to the Maritimes and as far west as Edmonton and in the U.S. from Maryland to Chicago.

The management of the co-operative is in the capable hands of W. V. Blewett who formerly managed the Theford Cold Storage.

Most of the members are post-war immigrants from Holland. Starting about 1949 these men and others like them started in from scratch to develop the Grand Bend Marsh. With very little capital, a lot of hard work and ingenuity these people have developed the marsh to where they have about 1200 acres in cultivation.

Mr. Blewett reports that the membership of Klondike Gardens gives the co-op excellent support. Almost all of the produce goes out under a voluntary Provincial or Federal Inspection.



Time out for refreshment in wheat cutting time. Cutter Bus Edwards helps Randie Gorham to a swig from vacuum jug.

THE FARM FRONT

With all the present concern over the dangers of so-called vertical integration and the threat it imposes on the individual farmer and grower, it is most encouraging to find a group of growers forging ahead through whole-hearted co-operative action. An outstanding case in point is the Klondike Gardens Co-operative Limited at Grand Bend.

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Deadly Lightning Nature's Killer

Since dawn, Leslie Mueller and his two brothers had been driving their tractors hard. They had 1,000 open acres to plow and harrow and plant in corn near Deerfield, Mich., and they ignored the mid-thunderstorm and the passing sprinkle of rain. Leslie's tractor was pulling a four-bottom plow. His younger brother Robert was spreading fertilizer about 400 feet behind him. Oliver, the eldest, had just gone on an errand.

Suddenly Robert felt a strange tingling in his body. Startled, he looked up and saw a puff of blue smoke coming from Leslie who was slumped on the seat of the tractor, his clothes on fire. Robert rushed to get Leslie off the tractor and put out the flames. Leslie Mueller was limp. He had been struck by an unseen bolt of lightning. From that moment, eight weeks ago, 32-year-old Leslie Mueller has been in a deep coma at the University of Michigan Medical Center.

Capricious, powerful, and often deadly (it kills an estimated 180 Americans a year), lightning can strike almost anywhere outdoors, in the middle of cities as in the most remote rural areas. Its ominous peculiarity is that it seeks the shortest route between earth and clouds. Trees are among its favorite targets, and when it hits a tree it spills over persons nearby as it did this spring when a bolt killed two children in New York City's Central Park.

Almost invariably, a person who is hit by lightning either dies immediately from hemorrhage or rupture of internal organs, burns, or electric shock, or he recovers in fairly short time. Leslie Mueller is a unique case because he has lingered so long in that shadowland between life and death. Now doctors have a chance to study, in a live patient, the human damage which lightning can cause — particularly to the brain and nervous system of the victim.

The bolt that hit Mueller flared

some guides as to whether this method of planting small seeds is practical, from the standpoint of both plant growth and cost. No recommendation of this method is yet being made.

Research plots are being set up at the University's muck soils farm near Bath, at the horticultural station at East Lismore, and in the lettuce producing areas around Ilmley City.

Perhaps if more farm people would divert more of their attention to doing a job at their own level instead of dissipating their energy worrying about the bog of vertical integration, the various elements in the trade channels would find less need to try and integrate producer marketing.

Horticulture scientists at the Michigan State University are trying out a new way of planting small vegetable seeds that may help farmers cut crop production costs.

Small seeds, like those of lettuce and cauliflower, are being imbedded in plastic strips. These strips are water soluble and will dissolve in a few hours after planting.

Seeds are imbedded or folded in the strip at the desired intervals. Time and labor needed to thin or block out such crops would then be reduced. Usually with these small seeded crops, the planting rate cannot be precisely controlled and the stand must be thinned after the plants emerge.

John Carew, horticulture specialist in charge of the project, says the study should provide

along his arms and ruptured his eardrums. Since he entered the hospital, skin burns he suffered when his clothing caught fire have been repaired by grafts. Prof. Basu K. Bagchi of the University of Michigan has used an electroencephalograph to trace Mueller's brain waves an found "diffuse, bilateral and non-specific changes in which both the upper and lower parts of the brain appear to be affected."

There were times last month when Mueller's eyes came open rolled aimlessly and closed. He was part of the coma and a hospital record, continued electroencephalograph readings have found none of the brain-wave changes that may give the first sign that the young farmer is recovering from the coma.

Meantime, all the medical experts can do is care for him and his family. Also, the doctors, his wife and three small children.

GAME CALLED, WET GROUNDS
After a few words, mostly spoken by the young wife, husband sprang to his feet. "You've gone too far," he claimed angrily. "This is my last quarrel. I'm going right out of your life."

"Oh, Henry, darling, what are you going to?" she cried. "Where I'll never trouble you again," he replied as he started to open the door. "I'll find a place where wild animals will wipe out the memories of the moment—perhaps in the jungle—or on the stormy seas."

As he spoke he opened the door, then closed it again, and turned sternly to his frightened wife. "It's lucky for you it's raining," he said.

Upsidedown to Prevent Pests
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Ladies—Here's A Cure For Shyness

Are you always been your problem? Do you blush when you make a faux pas? Are you embarrassed when singled out to meet new people? Do you never think of anything to say?

The trouble is that you are shy. Wondering what sort of effect you are having on other people?

Are you wearing the wrong "Am" color? You ask yourself, "Did I see me spill that spot on my clean tablecloth?"

First step in your cure is to forget all about yourself and start being interested in others. And out all about them, don't worry about yourself.

Study that woman who's the social point of an admiring group. Decide why she's so attractive. It isn't her looks, though she has made the most of these. It's because she's making the people around her feel important.

Just as all they say and do matters to her. As she listens, her attitude doesn't stray, and her smile shows that she is enjoying herself.

You can learn a valuable lesson from her. She doesn't talk about herself, but she has taken the trouble to find out something about the people she is talking to. She is interested in them. They are flattered and the conversation has been so rolling.

Everyone appreciates a good listener. Later on, you may have the courage to join the discussion. It's easy enough to ask questions at school, or a woman whether she has come across any good recipes.

About parties. Before you go, check your appearance — back and front — before a full-length mirror, and then forget about it. Get into your swing and it's easy to mingle.

It is no good standing by, waiting for a hostess, telling her how pleased you are to come. She would introduce you to other guests but if she doesn't, then on the outskirts of a talkative group. If you listen, you will pick up clues which will enable you to make an occasional comment and soon you will be accepted as one of the circle.

More About Those Plastic Bags
The \$20 million-a-year plastic industry embarked last month on a massive education campaign with which it hoped to save its own life by protecting the lives of children.

Faced with a wave of city, state, and Federal legislation that would outlaw ultra-thin polyethylene bags because they are suffocated 54 children since 1951, the industry acted up.

\$400,000 for an advertising campaign to warn the public that a plastic bag should never be used as a plaything or a makeshift covering for cribs, strollers, or play pens; that it should be destroyed immediately after serving its intended purpose. Beginning this week, the bags will compare plastic bags with other household items — such as electrical appliances and stoves — that can be lethal.

Working closely with public and private agencies such as the Public Health Service and the National Safety Council, the industry already has initiated research projects intended to eliminate any possible hazards, distributed millions of warning labels and pamphlets. William Cruse, executive vice president of the Society of the Plastics Industry, promised the educational campaign will continue "until there is not a mother, father, boy, or girl in this country who does not know what a plastic bag is for . . . and what it is not for."



CARNEGIE MEDAL FOR HEROINE — Shirley O'Neill, left, counselor with a San Francisco children's organization, will receive the Carnegie silver medal for heroism. Her fiancé, pulling a companion, mortally wounded by a shark off the San Francisco coast, to shore. With the medal goes a \$750 cash award.

TABLE TALKS

Here is an onion recipe that came originally from Southern Europe, but I think you'll find that it suits Canadian tastes just fine.

STUFFED ONIONS
6 large onions, 1/2 pound each
1 1/2 cup boiling water in saucepan
1 teaspoon salt
1 tablespoon butter
1/2 pound ground lean meat
3 slices bread
1/2 cup water
1 teaspoon chopped parsley
1 teaspoon salt
1/2 teaspoon ground black pepper

2 egg yolks
1/2 cup soft bread crumbs
1 tablespoon olive or salad oil
Boil onions in 1-inch boiling water and the 1/2 pound meat. Bring to boiling point, uncovered, and boil 5 minutes. Cover and continue boiling 5 minutes. Remove from hot water and place in cold water to cook. Drain well. Remove 5 layers from center, chop and saute in butter 3 minutes or until tender. Add meat and cook until the red has disappeared. Soak bread in water, squeeze dry and add to meat and onion. Stir in parsley, salt, black pepper, and egg yolks. Stuff into the onions. Place in a buttered baking dish. Sprinkle with bread crumbs mixed with olive or salad oil. Bake in a preheated moderate oven (375° F.) 1 hour or until tender. Yield: 6 servings.

SOUR CREAM SAUCE
2 tablespoons bacon dripping or shortening
1/2 cup finely-chopped onion
1/2 cup sliced fresh or well-drained canned mushrooms
2 tablespoons flour
1/2 teaspoon salt
1/2 pint (1 1/4 cups) commercial sour cream
1/2 cup water

Heat bacon dripping or shortening in a frypan; add onions and mushrooms and fry until tender. Add and blend in flour and salt. Gradually stir in sour cream and water. Cook over low heat stirring constantly, until thoroughly heated.

COCONUT COOKIES
3/4 cup semi-sweet chocolate
1/2 cup peanut butter
1/2 cup sweetened condensed milk
1/2 teaspoon salt
1 teaspoon vanilla
1 1/2 cups (about) tender thin flaked coconut

Melt chocolate over hot water. Add peanut butter and stir until smooth. Add milk, salt, vanilla, and coconut. Stir well to combine. Drop by teaspoon onto a well-greased baking sheet. Bake in a moderate oven (350° F.) 10 to 12 minutes. Remove from baking sheet while still warm. Makes 3 dozen cookies.

Note: Store in a tightly covered container.

DATE SQUARES
1/2 cup butter
1/2 cup icing sugar
1 cup plus 2 tablespoons sifted flour
1 cup brown sugar, firmly packed
2 eggs, well beaten
1 teaspoon baking powder
1/2 cup chopped dates
1/2 teaspoon vanilla

1 1/2 cups (about) flaked coconut
Cream butter, gradually add the icing sugar, mixing well. Combine 1 cup of the flour with the creamed mixture. Place mixture in a 9x9x2-inch pan and bake in a moderate oven (350° F.) 30 minutes. Makes 9 servings.

"It's an error to think of birds as being dumb," says a naturalist. Many of them are as smart enough to go south for the winter.

DEEP-SEA FISH TRAP — Three scientists at Scripps Institute of Oceanography show their invention, a deep-diving fish trap. They claim the trap will enable exotic fish from extreme depths to be caught and studied for the first time.

Poodle In Bed Groom On Floor

It was the first night of their honeymoon. "Won't be long, darling," said the bridegroom, after seeing his wife settled in her hotel. "I'll just park the car."

But it was next morning before he returned, a haggard and frantic figure. He had completely forgotten the name and address of the hotel, and eventually dozed off in the car, while his worried bride spent an anxious and miserable night alone.

A bad start for a honeymoon, but other newweds have had similar unfortunate experiences. When an American couple went on their honeymoon the bride insisted on bringing her pet poodle. Her husband didn't mind that so much, but he did object when his bride took the dog to bed with her. "You don't like it, sleep on the floor," she told him curtly.

He did — but the marriage was dissolved not long afterwards. "It is obvious," said the judge who tried the case, "that the woman prefers the dog to her husband."

Another bridegroom left his bride to unpack. "I'll be up in a few minutes," he whispered, tenderly. Twenty minutes later he climbed the stairs and made his way to what he thought was their room. It was dark, and he couldn't find the light switch. But he could hear somebody breathing in the bed so, undressed quickly, he pulled back the bedclothes.

Immediately there was a scream of terror. Realizing that something was wrong the startled bridegroom bolted. As he reached the door it was flung open, and light streamed in from the corridor outside.

In the doorway stood his

bride. Aroused by the scream, she had rushed in from next door. He had entered the wrong bedroom . . . and it took a lot of explaining.

Brides can also make mistakes on their wedding night. When a couple went to register at a hotel, the over-excited bride seized the pen first — and signed with her maiden name. That little error took a bit of smoothing over, too. It was some time before the desk clerk was convinced that they were really man and wife.

Another bride also had good cause to be indignant. Her husband spent half the night praising the virtues and attractions of a previous girl friend. Eventually, the angry bride rebelled, bundled the tactless bridegroom out of the room and locked the door. He sought refuge in the bathroom, emerging next morning cold, miserable and considerably chastened.

During their seaside honeymoon one bride met an old flame. She greeted him warmly, and he was equally enthusiastic. Soon they were going everywhere together, leaving the wretched and fuming bridegroom on the sidelines.

At last he asserted himself, and there was a flaming row. White-faced, her eyes glittering with rage, the bride tore off her wedding-ring and hurled it in her husband's face. "If that's the sort of jealous creature you are," she snapped, "I'm through with you!" A few hours later she and her lover disappeared — and the next time the three met was in the honeymoon hotel.

Another honeymoon didn't have that result, but it could easily have done so. The morning following the wedding, the bride ran down to her mother and, despite her husband's frantic pleas, refused to return. But thirty-five years later they met again — and fell in love for the

second time. Now they are living happily together.

Mothers-in-law can sometimes cause trouble, even between newweds. But in one instance this trouble started on the first night of the honeymoon. When the bride's mother came too — and firmly insisted that she intended sleeping with her daughter.

"We've always slept together since she was a little girl," she told the astonished groom. "And we're not going to be parted now!"

That marriage also ended disastrously.



NATO PULL-OUT — Newsmag spots three French cities (X's) where NATO fighter-bomber squadrons are stationed. Gen. Lauris Norstad, NATO commander, has threatened to pull out 200 jets in view of France's refusal to accept U.S. nuclear weapons stockpiles without being given full control over their use.

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If Johnny Can't Read, It Could Mean That He Is Headed for a Mental Illness

By JERRY BENNETT
NEA Staff Correspondent

Washington — Doctors hope some day to be able to predict whether your child will suffer mental ailment by simply giving the youngster a reading test. And if they know a child is susceptible to mental illness, scientists have a better chance of preventing its occurrence.

The idea of using a reading test, a common educational tool, to fight mental disease is being studied by psychiatrists at the U.S. Public Health Service's Institute of Mental Health. It stems from two discoveries which point to a connection between an unstable mind and trouble in understanding the printed word.

The first is that juvenile delinquents, many of whom are mentally disturbed, often have trouble reading. The difficulty usually is apparent before a child turns 10.

The second involves a Mental Health Institute study of poor readers who live in a nearby Maryland county. It shows that these children have a better chance of being scattered throughout the area, these youngsters are clustered in specific neighborhoods. Psychologists say this indicates that there might be some unknown factor about life in these communities that triggers the reading difficulties.

They explain, however, that before they can spend time tracking down this unknown villain, they must first make sure that reading disability is a symptom of an impending mental affliction. They explain that reports which show most disturbed kids are poor readers.

A PHS estimate of the number of mentally disturbed kids alone who receive hospital care each year totals more than 270,000. In addition are unknown numbers who receive therapy in a doctor's office.

Dr. Yolles explains, "I don't think there is more mental illness among kids today than there was in the past. It's just that we're paying more attention to the problem than we did years ago. Therefore, you see more kids in clinical centers."

What troubles Dr. Yolles most about this situation is that doctors are having to spend valuable time with kids who don't need a psychiatrist.

"We get a lot of kids these days," he says, "who are not disturbed but disturbing. When you examine them, it's the lack of evidence of a clear mental disease."

He believes many of these children could be handled just as effectively by social workers and child welfare experts who specialize in helping problem kids. "Sometimes it's their parents who need the treatment," Dr. Yolles says.

He explains that a child's troublesome behavior often stems from an unhappy situation at home. And in many cases, this situation is caused by misguided or neurotic parents. Once the parents are straightened out, he explains, the kids usually start to behave.

That's why Dr. Yolles and his staff have a clinic rule that parents always attend psychiatric sessions with their kids. "You'd be surprised how much good this can do," he explains.

"When the family members start talking to each other frankly, they often realize the mistakes they are making. Once this happens, the problem is often straightened out in a short amount of time."

Sometimes, however, doctors discover that a child is so confused or upset that he should be classified as mentally ill. These patients usually require long-term individual sessions.

It's because of these seriously ill kids that Dr. Yolles believes psychiatrists should develop more therapy short cuts like the family treatment technique. He declares, "We need to devote more time to people who need psychiatric treatment rather than social adjustment."

After Spotting Potentially disturbed child through a reading test, a psychologist could learn the patient's basic problem through such techniques as shown above. The child's reaction to each small figure provides a key to the diagnosis.

CROSSWORD PUZZLE

ACROSS
1. Long way
4. Unburnable matter
5. Weakness
6. Past
12. Whimsy
14. Crested mountain
15. Dismissal
17. Protection
19. Asiatic country
20. Do us
21. Coal binger
22. Moderate
26. Collective of
27. Shield
28. Hair
29. Stuff
30. Wave sound mentally
31. Jet
32. Parades
33. Withers
34. Down (prefix)
40. Leaves suddenly
41. Outline
42. True birds
43. Person fairly
44. Answered
45. Address
46. Time slowly
47. Affirmative
48. Draining
49. Down

DOWN
2. Keen
3. Less complex
7. Puss
8. Equality
9. Outrigger
10. Knock
11. More pleasant
13. More learned
16. Cut
18. Turkish
23. Prongs
24. Medical study
25. Storm
26. Puff
27. Time units
28. Opposite
29. Body of a church
31. Repairs
32. More pleasant
33. APOE seeds
36. Tool for digging post
37. Veneration
38. Vile
39. Craft
40. Beverage
41. Musical note



With crop ready and weather ideal, wheat harvesting in the grain belt does not stop after an eight-hour day. This operator continues work long after sundown. The combine is equipped with lights for cutting at night.