



SMOKING MACHINE pulls on 60 eigenst in front of Dr. Evarts Graham, who, with his collaborator on the mouse owner research, Dr. Ernest Wyader, perforted the robot. The automaton simulates the smoking transcer of humans

and is a controllable means of reflecting smoke residue for animal treat (fedou). Goe burners light 10 eigenets at a time and a vacuum pump creates 18-second (obsilations. The smoke flows down into condensation flexia cooled by dry (oc.



CONDENSED SMOKE collected to flatis in examinal by Researcher Adels Countryer, Constituents of the tax include minerale, waves, alcubal, minering.



SOLUTION OF SMOKE from gammy residue is painted on the shaved back of mouse. Sufface skin tissue is somewhat similar to internal long tissue.



first are benign (right), then become malignant (left). Painting period corresponded to 30 years in man.



smoke, a chemist at American Tobacco Co. lab collects each in vertical series of flasks.



TAGGING PRODUCTS of tobacco smake with radioactive carbon, eccentrists at the Medical Callege of Virginia hope to find out what parts of the hody each component affects and in what was they are affected.



SURVEYING INCIDENCE of languarour in smokers, American Cancer Society files quartionsaires on 201,000 U.S. men.

SMOKE GETS IN THE NEWS

Doctors report tobacco tar induces mouse cancer, note rise in cigaret use and human lung cancer

Last week American smokers pricised up their ears at a piece of medical news that caused a rash of frightening statements from emissent dectors attending the Greater New York Denall Meeting. Gignetes, smokers heard, had for the first time been shown to be capable of causing cancer. While most smokers merely puffed thoughtfully, solution stocks dropped, caparet substitutes did a brick hastiness and scicutific tountered scientist over the significance will not the soundness—of the new discovery.

The cause of the current challenge to a major nuticeal habit was the discussion of research by Dr. Evarts Graham and Adele Croninger of St. Louis' Washington University and Dr. Ernett Wynder of the Sloan-Kettering Institute of New York. They had repeatedly painted the skins of mice with eigeret tor, inducing skin cusper in 44% of the animals. Startling in itself, the results gained impact when New Orleans' famed lung surgeon, Alton Orleanst, brought furth statistics on human cancer to correlate with it. "Based on the number of people who are smoking now," he said, "I product that in 1970 cancer of the lung will represent 18% of all cancer . . . one out of every 10 or 12 men." He pointed out, in passing, that the incidence of lung cancer is less in cigar and pips senskers, who inhale lung.

The statistics to which Ochaner referred are among those which sparked bloogleal testing of tobeco three years ago. For of all diseases cancer of the lung is the fastest-growing cause of death in the U.S. In 1933, 3,400 people died of lung cancer: an estimated 22,000 will be dead by the end of 1953. Even allowing for a growing and aging population, the death rate due to this lethal illness has increased fourfield during the past 20 years. In seeking the course of this medical newstery, doctors rame upon another sobering statistics during the same 20 years U.S. smokers increased their cigaret consumption foundfold. Yet world the Wynder-Graham report, it could not be stated that any cigaret ingredient could cause cancer in a living creature.

The American Tehacoo Company hastened to point out that tasks on mise do not provide that tobsect can cause lung cancer in men. The figures on human deaths show that heavy anokers are likeliter to get lung cancer in later life than monsmokers (Wynder says up to 20 times likeliter). They do not necessarily mean everyone should promptly stop smeking, for this might crease nervous allments in smokers who would fixed they had lost a comforting relaxation. The research does indicate that the factor harsful to mice must be isolated, and to this end several medical teams, some aided by solatoos company monty, are now working.



IN SMOKE CHAMBER mice breathe billswing eigeret furnes, Dr. J. M. Essenlerg of Chicago Medical School found significant presentage of them got lung ourer, fieth aistorine is ealphit, Other doctors hlame amenic speays used by garvets.



SPLITTING TAR into fractions in earth for cancer-causing agent is done at New York University, partly supported by the Bunyon Fund. Tar is first dissolved in hig flashs, rightly, then beared. Finally the ingredients can be drawn off separately.

FRESH HOPE BUT HARD REALITY

THE PRESIDENT'S SPEECH CLEARED THE AIR BUT DID NOT DISPEL DANGER TO THE FREE WORLD

CUBEBS OR COFFIN NAILS?

In two-fisted Scattle recently a man in a bar ran out of filter-tip ciparets and went to the weading machine to get some more; be wanted a particular brand of filter tips; no other kind would do. When he discovered that the trandhe wanted was not stocked, he kicked in the suschuse. A psychoanalyst might say that the man's rage stemmed from anxiety over signs of cancer in mine subjected to eigenst tare (see po. 20, 21).

U.S. eightet stockers are doing a lat of werrying there days. The sale of filter-tip branch is increasing and so is that of filtered holders. Cigaret manufacturers are, of course, doing a lot of worrying themselves: if every U.S. smoker smoked even one less eightet a day that would mean a failly drop of about \$700,000 in total retail volume; it is already appearent that this year's sales are going to run about 1% less than last wear's.

Gigaret emoking became universally acceptable in this country comparatively recently. In the days of our youth our elders claimed that eigarets (even cubebs) would not only stunt your growth but inevitably lead to wishywashiness of character. The railroad mogul, E. H. Harriman (Averell's papa), once thundered, "We might as well go to the insune asylum for our men as to employ cigaret smokers." But then came World War I, Flaming Youth, etc., and a man who smoked a cigaret was no longer considered a gigolo. Females also took up cigarets although the tobacco industry for a while was pretty timid about admitting this. Thirty years ago the nations' billboards were plastered with pictures of a pretty girl telling her cigaret-emoking escort to "blow some my way."

Now let us consider the case of a U.S. male more than 45 years old who is one of Lirr's editorial writers. He has a long and depletable smoking history, and for some time now he has suspected that cigarets are not good for him. In fact, he would have given them uplong ago if it hadn't been for the females in his tandly. Every time he stops smoking, it makes him so cross and jumpy that the females beg, even command, him to etart smoking again; in the interests of family harmony there is nothing to do but resume. Besides, he hopes he isn't a mouse. Let's evaluate the President's magnificent address to the United Notions properly; that is, without emotion and in the light of preent reality. He did clarify beyond all misunderstanding the United States' attitude and position on atomic warfare. The clarification was very much needed and could scarcely have come at a more opportune time.

Misunderstandings about our policy and intentions were very witespeed, particularly in Europe where willful vilification of the U.S. often has been carried to about lengths. Among neutralists in France, for instance, American policy was misrepresented in a way that echoed almost word for word the Communist peopagands. In effect we were pictured as demanding copiculation of the Soviet Union at the point of a hydrogen beest. To such misrepresentation and distortion the President's speach offered vigorous and far-sighted refutation.

The address was broadcast in 33 languages other than English and made an instant impression on all men who are still free to listen and open to argument. In London even such a carping and bitter critic of this country as the left-wing New Statesman and Nation grudgingly conceded it was a hopeful shift. At the other end of the journalistic spectrum the conservative Daily Mail said no man could have gone further than the Precident." It was the same way in France where we welcome particularly praise by the editor of Le Monde, a paper which more often than not has been severely critical of the U.S. The applause that swept through nations directly allied with us even found an echo in India where the press was overwhelmingly in favor of the President's proposal. It is "one of the most memorable pronouncoments of [Eisenhower's] presidential career-" said the Times of India, "the fearless recognition . . . that common effort rather than mutual threats can provide the foundations for international atomic control.10 This kind of impression can hardly be countered by the routine cry of warmongering and the other familiar forms of Communist abuse.

An honest pledge

Obviously the good effect produced by the President's speech would be quickly offset if the impression were given that the offer to share atomic energy for peacetime purposes was no more than a clever or crafty diplomatic maneuver—which it certainly is not. The U.S. originally took the initiative in proposing international coatrol of atomic armounts when it advanced the Baruch plan. It stood ready then to implement that offer just as it stands ready today to fulfill the President's commitment in the event of a wholehearted Soviet acceptance.

Meanwhile the dangers to the West, including stomic variare, remain. They cannot be dispelled by any single gesture or formula. The dangers exist not simply because weapons exist but because two worlds exist upon a single planet: the world of aggressive Communism and the world of human freedeen. And, outside the U.S., the "free world" (or the would-be free world) is not yet strong enough to resist subversion and destruction.

There is a long list of things which the free world must do to gain that strength. Most of these items have long been on the agendu of statesmen and crusaders.

These items are familiar, complicated and troublescent, succeptible neither to easy treatment nor prompt dispatch. Their conatant restatement is often boring, but the fact that they are boring does not do away with them. For instance:

- We have to cut through the smog of futile negotiations at Panmunjom and find a way to liberate and unite Korra.
- We must pacify Indochina and free her from the threat of Communist subjugation.
- We must give Pakistan military sid and
 belp strengthen her defenses because Pakistan is the key to the establishment of an effective defense for the Möddle Fast.
- We must achieve settlement of the Triestic problem because until it is settled there will be a major gap in the Mediterranean line.
- We have to exciting to develop our bases newly granted by Spain hocause they are coasnitial to the support of a free Europe.
 We must being into operation the European Defense Community which is the first step toward a truly united Europe and the one way by which Germans may take their place in the ranks of Europe's defenders.

Familiar-and boring-though these prob-Icus be, let us remember that the continuing atomic stalemate too was becoming a pretty arid subject before the President's inspiring address stirred anew the imaginations and hopes of peace-loving peoples. These other problems also call for constant and serious consideration leading to action and decisions. Certainly they have the most urgent claim on the President's energy and leadership, by the very force of events asserting a priority over all others. They assert their priority because as we diminish the direct threat of aggression so do we diminish the threat of atomic war. We diminish that threat by developing strength in ourselves and in our friends. While we seek to dominate no other people, we cannot allow ourselves or others to be dominated or to be held in terror by the prospect of atomic destruction or see freedom whittled away by weakness.

For a Very Merry TREAT instead of a TREATMENT!

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for Christmas!





Give cartons of Luckies this Christmas! Luckies taste better...cleaner, fresher, smoother!

"This Christmas... you bet I won't forget!"



A GREAT SMOKE ... A GREAT GIFT...

AND THAT'S PUTTING IT MILDLY!

WHITE OWL Cigars

Gift-Wrapped for Christmas



