

Infantry co-operating in latest atomic warfare experiments saw from close range the now familiar but still terrifying explosion of the bomb that has transformed the world. What the troops did not see, and what the rest of us sometimes forget, is that atomic energy, though nursed in war, can be a blessing in peace. Beneath the sinister mushroom 80,000 died ~~in the first explosion~~ at Hiroshima. Today behind the mushroom science marshals its atomic resources to fight disease, drive industry, propel ships and aircraft. The atom may yet be the answer to man's age-long quest for cheap and abundant power.

The giant Bevatron at the University of California is one of several plants built to harness the atom - an activity now a major industry, employing in America alone 150,000 men and women. At Brookhaven, New York, the cosmotron is the atom smasher, 1953 model. Just what it's doing - just ~~what~~ <sup>how</sup> - is a close-kept secret, itself no small achievement considering how many ~~human~~ <sup>tongues</sup> there are that might wag. Secret also, down at Los Alamos, is the quaintly named water boiler reactor - broadly, an apparatus producing controlled nuclear reaction, just as the atom bomb is uncontrolled reaction. Taking every precaution to protect ~~themselves~~ <sup>themselves</sup> the staff use the myriad tiny explosions of the reactor to make radio isotopes for hospitals (including some that may eventually cure cancer) others for research in biology and agriculture. Another branch develops atomic power already obtainable as economically as from coal. If coal had not to be used as fuel its by-product value would rise enormously.

To handle radio-active materials safely they've produced the Master Slave Manipulator - nearest thing to a robot yet made. Using it the scientist works unharmed behind three feet of glass and concrete. He can even saw open a container of radio-active metal and remove a specimen for testing.

(3 out) Parallel with all this American progress, atomic research proceeds in the deceptively rural surroundings of Harwell, Britain's atomic headquarters. Our country, where the atom was first split and the marvels of the new science opened to the world, continues in the forefront of atomic research. Here, quietly and we hope secretly, goes on the threefold activity of nuclear science: The making of medical isotopes, the manufacture of bomb material, such as Doctor Penny tested off Northern Australia, and the production of atomic power. Tremendous progress in less than 10 years.