

THE MIND OF ALBERT EINSTEIN

FOR the last 20 years of his life, Albert Einstein, the mathematician and physicist whose work provided the theoretical background for the atom bomb, could steal newspaper space even from filmstars, and this as the result of scientific writings so abstruse, so difficult, that the most urbane of newspaper popularisers were uneasy in their search for illustrative metaphors. The fact that as a boy Einstein was not good at classwork, that indeed he was so slow in learning to speak that his parents feared him sub-normal, has been used to encourage more than one class straggler. His complete disregard for money, his fiddle playing and his yachting have all become popular legend. Perhaps not so well known is the fact that most of his Special Theory of Relativity was worked out when he held a minor position in the Swiss Patents' Office, where it is said, he had to thrust out of sight formulae-covered scraps of paper when the supervisor approached.

Einstein's scientific writings were profound, novel and in their own sphere sensational. But his other writings, on world government, on social justice, on his people the Jews, were simple, sincere—and frequently dismissed as the work of an other-worldly genius who should have kept to his own sphere. We let some extracts from his writings speak for themselves.

Of Himself

THE bitter and the sweet come from the outside, the hard from within, from one's own efforts. For the most part I do the thing which my own nature drives me to do. It is embarrassing to earn so much respect and love for it. Arrows of hate have been shot at me, too; but they never hit me, because somehow they belong to another world, with which I have no connection whatsoever. I live in that solitude that is painful to youth but delicious in the years of maturity.

"SCIENCE without religion is blind."—Address Theological Seminary

On Religion and Philosophy

"NOBODY, certainly, will deny that the idea of the existence of an omnipotent, just, and omni-beneficent personal God is able to accord man

solace, help and guidance; also, by virtue of its simplicity, it is accessible to the most under-developed mind . . . but in their struggle for the ethical good, teachers of religion must have the stature to give up a personal God;

"SCIENCE without religion is lame; religion without science is blind."—Address given at Princeton Theological Seminary (1939).

that religion is lame; without science is blind, given at Princeton University (1939).

will have to avail themselves of these forces which are capable of cultivating the Good, the True, and the Beautiful in humanity itself. This is, to be sure, a more difficult but an incomparably more worthy task." — *Science, Philosophy and Religion* (1941).

On Ethical Values

"SOCIALISM is directed towards a social-ethical end. Science, however, cannot create ends and, even less, install

them in human beings: science at most can supply the means by which to attain certain ends. . . For these reasons we should be on our guard not to overestimate science and scientific methods when it is a question of human problems."—*Why Socialism?* (1949).

On Politics and Economics

"THE economic anarchy of capitalistic society as it exists today is, in my opinion, the real source of the evil (of our time). We see before us a huge community of producers, the members of which are unceasingly striving to deprive each other of the fruits of their collective labour. . . I am convinced there is only one way to eliminate these grave evils, namely, through the establishment of a socialist economy. . . Nevertheless, it is necessary to remember that a planned economy is not yet socialism. A planned economy as such may be accompanied by the complete

enslavement of the individual. The achievement of socialism requires the solution of extremely difficult socio-political problems: how is it possible, in view of the far-reaching centralisation of political and economic power, to prevent bureaucracy from becoming all-powerful and overweening? How can the rights of the individual be protected and therewith a democratic counter-weight to the power of democracy be assured?"—*Why Socialism?* (1949).

On the Atom Bomb

"TODAY, the physicists who participated in forging the most formidable and dangerous weapon of all time are harassed by a feeling of responsibility, not to say guilt. We delivered this weapon into the hands of the American and British people as trustees for the whole of mankind, as fighters for peace and liberty. But so far we fail to see any guarantee of peace, we do not see any guarantee of the freedoms that

"I DO not believe that a great era of atomic science is to be assured by organising science in the way large corporations are organised. One can organise to apply a discovery already made, but not to make one. Only a free individual can make a discovery. . ."
—"Atomic War or Peace" (1945).

were promised the nations in the Atlantic Charter."—*Address at Nobel dinner (1945).*

On International Affairs

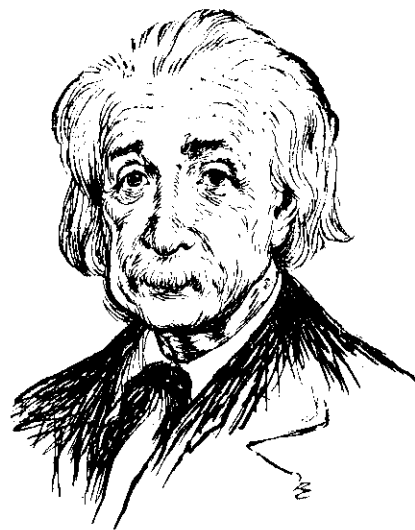
"THE Russians have made it clear that they will do everything within their power to prevent a supra-national régime from coming into existence. They not only reject it in the range of atomic energy, they reject it sharply on principle and thus have spurned in advance any overture to join a limited world government. . .

"But one must admit that the United States has made ample contribution (to Russian fears). Indeed, this country has conducted its Russian policy as though it were convinced that fear is the greatest of all diplomatic instruments."—
—From *Atlantic Monthly* (1947).

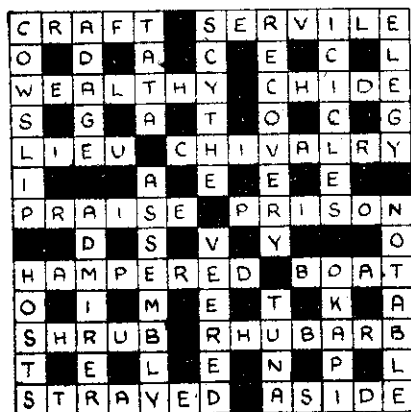
On Intellectual Freedom

"WHAT ought the minority of intellectuals do against this evil (that of suppression of intellectual freedom)? Frankly, I can see only the revolutionary way of non-co-operation in the sense of Gandhi. Every intellectual who is called before one of the committees ought to refuse to testify, i.e., he must be prepared for jail and economic ruin, in short, for the sacrifice of his personal welfare in the interests of the cultural welfare of his country. . . . If enough people are ready to take this grave step they will be successful. If not, then the intellectuals of this country deserve nothing better than slavery which is intended for them."—*Letter to William Fraenkel, school teacher, who refused to testify before a U.S. Senate Committee concerning his alleged Communist connections* (1953).

WHEN asked in an interview last year what changes he would make if he were to live his life over again, Einstein remarked that next time he would be a street cleaner or a plumber.



(Solution to No. 744)



Clues Across

1. Feeble fish, but not necessarily a fish at all.
7. Here we see the little devil take part in a collision.
8. Renounce one's opinion of the drink of the gods?
9. This liqueur could make sailors thin.
10. Suppress (4, 2).
11. You take this vessel twice during your return journey.
15. Topers in a cart apparently believe in putting it off until tomorrow.
17. 11 down, in order to treat.
20. It may all be sung, but it is mostly spoken.
21. Tui's ode is very dull.

"THE LISTENER" CROSSWORD

22. . . . neither having the — of Christians nor the gait of Christian, pagan, nor man. . . ." (Hamlet's speech to the Players).
23. Dear Pa! He does make a show.
24. "He is — and rejected of men; a man of sorrows, and acquainted with grief" (Isaiah ch. 53).
11. The end of a clause.
12. You don't have to wear it while drinking it.
13. Many cars have them, but they usually use trucks.
14. Flat, indeed? Indeed, yes!
16. Betoken. 18. Raced for a tree.
19. Found in **paraffin** also.

No. 745 (Constructed by R.W.H.)

Clues Down

1. Pshaw, sir! The navy must have them!
2. Upset him, and he'll leave no traces—unless, of course, his ghost comes back to haunt the family mansion.
3. "Men touch them, and change in a trice
The lilies and ———
of virtue
For the raptures
and roses of vice"
(Swinburne).
4. He wrote the words and Sullivan wrote the music.
5. This country consists largely of a health resort.
6. Sharp, with the result in the middle, perhaps?

