INTELLIGENCE AND ITS USES

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IN the last hundred years the civilized world has learned to trust science to teach it how to make the powers of wind and water, the energy of chemicals, and the vibrations of the ether do man's will and serve his comfort. Physical forces are being conquered by science for man. We may hope that man's own powers of intellect, character, and skill are no less amenable to understanding, control, and direction; and that in the next hundred years the world may improve its use of man-power as it has improved its use of earth-power.

Not only philanthropists and philosophers, but hard-headed, practical men of affairs in business, education, and government, are now looking to psychology, the science of human behavior, to provide principles for human engineering—for the efficient private and public management of man-power or "personnel." For example, the Secretary of War and Adjutant-General McCain, in seeking specialists to help "(1) secure a contented and efficient army by placing each enlisted man where he has the opportunity to make the most of his talent and skill, (2) to commission, assign, and promote officers on merit, and (3) to simplify the procedure of discovering talent and assigning it where most needed," intrusted the task to psychologists. The co-operation between psychologists and business men in the organization that resulted (the Committee on Classification of Personnel in the Army) made clear to each group how much it had to learn from the others. And, in general, to-day, science is eager to make use of the practical experience of men and women who succeed in managing human nature; and men of affairs are realizing that the experiments and measurements and formulæ of the scientific man may turn out to be the most "practical" things in the world.

As a sample to illustrate both what the scientific study of personnel has done and what it has to do, we may take the problem of intelligence and its uses.

Men talk freely about intelligence, and rank their acquaintances as having very little, little, much, or very much of it. If, however, they try to state just what it is, and how it is to be measured, there is difficulty. One says, "It is thought-power; and it is measured by the person's ability in school and in life." Another retorts, "What is thought-power?" and calls attention to the fact that ability in school and ability in life are different things. Smith declares that "Intelligence is ability to learn," and when asked, "To learn what?" adds, "To learn anything." A teacher present then observes that one of the slowest boys at learning Latin whom he ever knew made record progress in learning to swim, skate, and play ball. Jones, who has turned to the dictionary, says: "This suits me, '*Readiness of comprehension*'! I call a man intelligent who can understand questions—see the point. Give me fifteen minutes' interview with a man and I can give you a measure of his intelligence." Some one at once objects that a man may be slow and incorrect in responding to questions, but quick and sure in locating the trouble with an automobile, or in seeing a bargain, or in sizing up the temper of a mob of strikers

The facts of every-day life, when

inspected critically, indicate that a man has not some one amount of one kind of intelligence, but varying amounts of different intelligences. His ability to think with numbers may be great; his ability to think with words small. He may be a successful student of history and a failure at learning physics. Compare Grant's intelligence in using an army with his intelligence as a business trader. In our ratings of men we unconsciously strike a sort of average of his abilities in learning, thinking, and acting. The source or cause of this average ability is what we really have in mind when we speak of his intelligence.

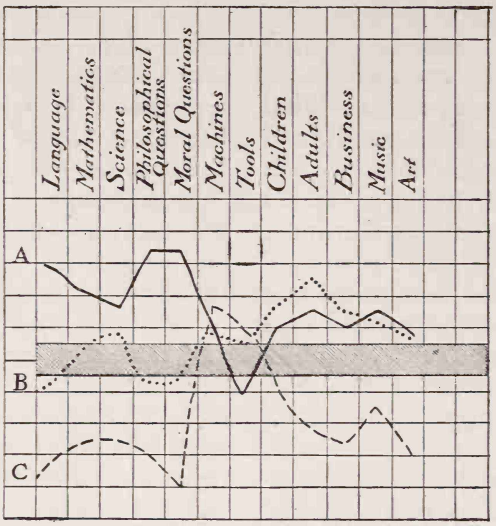


FIGURE 1
The shaded area represents the average intelligence of the adult American

Numerous scientific investigations of human intellectual abilities confirm and extend this view. No man is equally intelligent for all sorts of problems. Intelligence varies according to the life situations on which it works. A man so feeble-minded in most matters that he is confined in an asylum is found to play a first-rate game of chess. A man who in his day was famous the country over as editor, speaker, and executive never was able to pass freshman mathematics in college. Such extreme cases are, of course, found rarely. There is a general rough correspondence or correlation, such that a man notably intelligent in one respect will usually be above the average in others also. But the correlation is far from perfect. Shakespeare was successful as a business man, and doubtless would have made a good record as a lawyer, farmer, statesman, navigator, or grammarian; but no competent person believes that his intelligence was equally adapted to all these. The general fact may be kept in mind in the form of a diagram like Fig. 1. The continuous line represents the intelligence possessed by individual A, the height of the line representing the amount of intelligence. The dotted line tells the same story for B. The dash line tells the same for C. A is on the average the more intelligent, and C the least; but B surpasses A in several respects, and C surpasses A in two.

A perfect description and measurement of intelligence would involve testing the man's ability to think in all possible lines, just as a perfect description and measurement of the mineral wealth of a state would involve adequate testing for iron, copper, gold, silver, lead, tin, zinc, antimony, petroleum, platinum, tungsten, iridium, and the long list of rarer metals.

For ordinary practical purposes, however, it suffices to examine for three "intelligences," which we may call mechanical intelligence, social intelligence, and abstract intelligence. By mechanical intelligence is meant the ability to learn to understand and manage things and mechanisms such as a knife, gun, mowing-machine, automobile, boat, lathe, piece of land, river, or storm. By social intelligence is meant the ability to understand and manage men and women, boys and girls—to act wisely in human relations. By abstract intelligence is meant the ability to understand and manage ideas and symbols, such as words, numbers, chemical or physical formulæ, legal decisions, scientific laws and principles, and the like. Mechanical

intelligence and social intelligence refer to thought and action directly concerned with actual things and persons in one's hands and before one's eyes. When the mind works with general facts *about* things and people, as in the study of physics and chemistry, or history and sociology, its action is referred to abstract intelligence.

Within any of these intelligences a man displays relatively great consistency. The man who learns carpentering quickly and well could commonly have done nearly as well as a mason, sailor, plumber, millwright, or auto-repair man. The man who succeeds as a politician would commonly have done well as a salesman, hotel clerk, confidence man, or, if provided with certain accessory traits, as a parish priest or school principal. The boy who cannot learn algebra, history, and sciences will probably be unable to learn law, engineering, philosophy, and theology.

Between one and another of the three there is relatively great disparity. The best mechanic in a factory may fail as a foreman for lack of social intelligence. The whole world may revere the abstract intelligence of a philosopher whose mechanical intelligence it would not employ at three dollars a day!

In recent years much progress has been made in devising means to measure intelligence, with the result that we can discover how individuals and races and the sexes differ in the amount of it which characterizes each; how this and that form of training influences it; how much of it is required for success in any given occupation, and how it is related to other desirable qualities, such as mental health, cheerfulness of disposition, leadership, industry, honesty, determination, public spirit, loyalty, and co-operativeness.

The greatest progress has been made in the case of abstract intelligence. If the reader will, without any preparation, turn to the four tests and spend exactly 90 seconds on A, 180 seconds on B, 180 seconds on C, and 480 seconds on D, he will have experienced a fair sample of a measurement of abstract intelligence. If, instead of these four "tests," he had done the ten or twelve of which they are a sample; and if, instead of doing only one form of each, he had done five or six forms on five or six days taken at random so as to represent his average condition of alertness; and if he had been brought up by English-speaking parents with the average opportunity of a child in America to-day—then his score would be an approximate measure of his abstract intelligence. If he had had special opportunities, or previous practice with the tests or others like them, a discount would be necessary before his score would represent his ability. Conversely, if he had had less than ordinary advantages. The score would be only approximate because any limited series of tests

TEST A

If the two words of a pair mean the same or nearly the same, write "s" opposite them. If they mean the opposite or nearly the opposite, write "o" opposite.

1 wet—dry.
2 in—out.
3 hill—valley.
4 allow—permit.
5 expand—contract.

6 class—group.
7 former—latter.
8 confess—admit.
9 shy—timid.
10 delicate—tender.

11 extinguish—quench.
12 cheerful—melancholy.
13 accept—reject.
14 concave—convex.
15 lax—strict.

16 assert—maintain.
17 champion—advocate.
18 adapt—conform.
19 debase—exalt.
20 dissension—harmony.

21 repress—restrain.
22 bestow—confer.
23 amenable—tractable.
24 avert—prevent.
25 reverence—veneration.

26 fallacy—verity.
27 specific—general.
28 pompous—ostentatious.
29 accumulate—dissipate.
30 apathy—indifference.

31 effeminate—virile.
32 peculation—embezzlement.
33 benign—genial.
34 acme—climax.
35 largess—donation.

36 innuendo—insinuation.
37 vesper—matin.
38 aphorism—maxim.
39 abjure—renounce.
40 encomium—eulogy.

can test intelligence only as it operates in certain limited ways with limited problems. If John has devoted his mind chiefly to thinking with words, while James has devoted himself chiefly to thinking with chemical and electrical symbols, John will be overrated and James underrated by the series of four tests in our illustration. Also, if Mary has devoted her mind almost exclusively to one subject, say music, while Jane has devoted hers about equally to a thousand subjects, any dozen short tests are likely to give Jane a better chance than Mary. If the test were, "Choose the thing you know most about and tell what you know about it," Mary would have an unfair advantage. Also, if an individual possesses a very high degree of intelligence, the tests may be too easy and the score may represent the speed with which he can think rather than the total efficiency of his thinking.

Other limitations will occur to the critical reader. The fact remains, however, that, life being as it is, all the limitations do not prevent a well-chosen series of tests, if used with ordinary discretion and interpreted with ordinary common sense, from giving an approximate measure of an individual's abstract intelligence, at least during childhood and youth. Schools find them useful as a means of grading pupils; employment managers find them useful in hiring and placing employees; the army found it profitable so to test nearly two million of its recruits.

When an individual is measured by any of the standard tests, he is given a score in such terms as make it convenient to compare him with other individuals and with various requirements. For example, John Smith, aged 15 years, 0 months, may be reported as: "Mental age 12 yr., 0 mo.," or as, "Intelligence quotient (or I Q) 80," or as, "A 7-percentile intelligence," or as, "Int. = −1.5 S. D." Mental age, 12 yr., 0 mo., means that John did as well in the tests as the average child of 12 years, 0 months. I Q = 80 means that John's mental age as shown by the tests was 80 per cent. of his chronological age. A 7-percentile intelligence means that 7 per cent. of the population (white) of age 15 years, 0 months, will do worse than John in the series of tests in question, and 93 per cent. will do better. Int. = −1.5 S. D. means that John is below

TEST B

In each of the lines below, the first two words are related to each other in some way. What you are to do in each line is to see what the relation is between the first two words, and underline the word in heavy type that is related in the same way to the third word. Begin with No. 1 and mark as many sets as you can in 180 seconds.

SAMPLES
sky—blue : : grass— **table green warm big**
fish—swims : : man— **paper time walks girl**
day—night : : white— **red black clear pure**

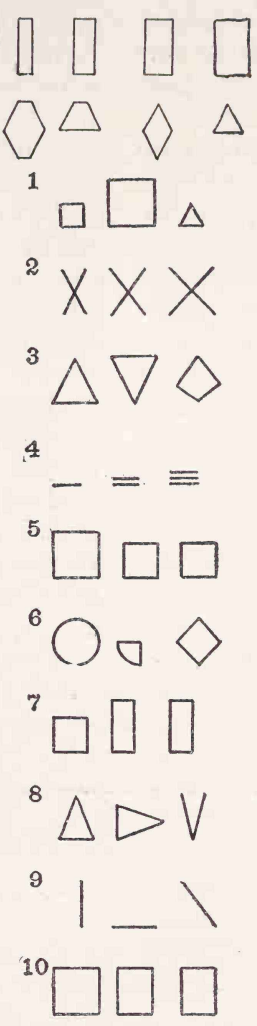
1 gun—shoots : : knife— **run cuts hat bird.**
2 ear—hear : : eye— **table hand see play.**
3 dress—woman : : feathers— **bird neck feet bill.**
4 handle—hammer : : knob— **key room shut door.**
5 shoe—foot : : hat— **coat nose head collar.**

6 water—drink : : bread— **cake coffee eat pie.**
7 food—man : : gasolene— **gas oil automobile spark.**
8 eat—fat : : starve— **thin food bread thirsty.**
9 man—home : : bird— **fly insect worm nest.**
10 go—come : : sell— **leave buy money papers.**

11 peninsula—land : : bay— **boats pay ocean Massachusetts.**
12 hour—minute : : minute—**man week second short.**
13 abide—depart : : stay— **over home play leave.**
14 January—February : : June— **July May month year.**
15 bold—timid : : advance— **proceed retreat campaign soldier.**

16 above—below : : top— **spin bottom surface side.**
17 lion—animal : : rose— **smell leaf plant thorn.**
18 tiger—carnivorous : : horse— **cow pony buggy herbivorous.**
19 sailor—navy : : soldier— **gun cap hill army.**
20 picture—see : : sound— **noise music hear bark.**
21 success—joy : : failure—**sadness success fail work.**
22 hope—despair : : happiness—**frolic fun joy sadness.**
23 pretty—ugly : : attract— **fine repel nice draw.**
24 pupil—teacher : : child— **parent doll youngster obey.**
25 city—mayor : : army— **navy soldier general private.**
26 establish—begin : : abolish— **slavery wrong abolition end.**
27 December—January : : last— **least worst month first.**
28 giant—dwarf : : large— **big monster queer small.**
29 engine—caboose : : beginning— **commence cabin end train.**
30 dismal—cheerful : : dark— **sad stars night bright.**
31 quarrel—enemy : : agree— **friend disagree agreeable foe.**
32 razor—sharp : : hoe— **bury dull cuts tree.**
33 winter—summer : : cold— **freeze warm wet January.**
34 rudder—ship : : tail— **sail bird dog cat.**
35 granary—wheat : : library— **desk books paper librarian.**
36 tolerate—pain : : welcome— **pleasure unwelcome friends give.**
37 sand—glass : : clay— **stone hay bricks dirt.**
38 moon—earth : : earth— **ground Mars sun sky.**
39 tears—sorrow : : laughter— **joy smile girls grin.**
40 cold—ice : : heat— **lightning warm steam coat.**

the average for his age to an extent of 1½ times a certain standard amount. Thus, the adult inmates of asylums for the feeble-minded are mostly under 9 years, 0 months, in mental age. Children with I Q's of 60 or below later fill such asylums. An I Q of 100 means average intelligence. Unless he has extraordinary energy and devotion, a boy whose I Q is under 100 will be unable to graduate from a reputable American college. Children selected by competent observers as extremely intelligent will be found to have I Q's from 120 to 160.



TEST C

In lines 1 to 10 draw a fourth figure in each series such that the fourth figure is to the third as the second is to the first, as shown in examples A and B

Measurements of mechanical intelligence have received much less attention from psychologists and are not yet standardized, but they are under way. Two samples from a set of such tests may be briefly illustrated. The first is a series of dismembered objects to be put together. It begins with something the average child of four can do, such as to put a nut on its bolt, and progresses by graded steps to something which only the 90-per-centile adult can do without special training, such as to put together the pieces of an electric pull-socket, or of a very intricate lock. The second consists of a set of materials out of which the individual tested is told to make something, or to make as many things as he can in an hour, or to make as good a cart, derrick, and boat as he can, or to use the material in some other prescribed way. The merit of the product which he produces is estimated in comparison with certain average performances of 6-year-, 8-year-, and 10-year-olds, and so on, under similar conditions.

Convenient tests of social intelligence are hard to devise. A child's wit in reading facial expression might perhaps be measured by his success in selecting from such photographs as those in Fig. 2 when asked, "Which lady would you ask to help you?" "Which lady is thinking?" "Which lady is worried?" "Which lady is saying 'I will *not*'?" and the like. It is doubtful, however, whether pictures can be safely used in place of realities. And for most of the activities of intelligence in response to the behavior of human beings, a genuine situation with real persons is essential. Social intelligence shows itself abundantly in the nursery, on the playground, in barracks and factories and salesroom, but it eludes the formal standardized conditions of the testing laboratory. It requires human beings to respond to, time to adapt its responses, and face, voice, gesture, and mien as tools.

Whether we consider one of these intelligences or the composite of the three, it appears that each human being is equipped by nature with a certain degree of intelligence, much as he is equipped by nature with a certain strength of body or form of finger-prints. Individuals differ by original nature in intelligence as in stature or eye color or countenance. It is true that good training improves and bad training injures the mind, as it does the body; that nature's gift may be lost by accident or decreased by disease, neglect, and misuse. As things are in America today, however, the net effect of these disturbing factors does not greatly disarrange the order or decrease the differences

of individuals in respect to intellect. A boy who is the brightest of a thousand at the age of five will usually be in the top fifty of the thousand at the age of ten. The child who is at the lowest of a thousand at ten will almost never rise above the bottom hundred at fifteen. Kelley and others have traced the records of the same children year after year in school and found that in general a child keeps about the same position relative to other children in late as in early years. Terman's measurement of the abstract intelligence of the same children (over a hundred of them) at two periods five years or more apart shows very great constancy. Intelligence grows with general growth from early childhood to adult years, but its growth is in proportion to what it already is. A child holds his place in comparison with other children nearly as closely after five years as after five days.

Because of the recency of the science of mental measurements, we lack tests of the same individual at 16 years of age, 18 years of age, 20, 22, 24, and so on. It may be that certain of the children who seemed essentially dull were only growing slowly; and these may catch up in adult years, and some of the children with high I Q's at 10 or 15 may have merely "got their intelligence" early, as some children get their teeth early; these may sink back relatively. It may also be that the new trends of mind due to sex and adult ambitions will act differently on different individuals, stimulating intelligence in different degrees and even subtracting from it in some cases. As a rule, however, those who progress most rapidly go farthest; and those who have the most intelligence are least likely to have it lessened by the distracting force of sex or display or rivalry. Intelligence probably does not fluctuate very much more from fifteen to fifty than from five to fifteen. An individual's intelligence compared with that of other individuals of his age is, within limits, a stable, permanent characteristic of him. It can be at least roughly measured and the measurement used to prophesy and direct his career.

If we take a group of individuals and measure their success in life, as students

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TEST D

On each line of dots write the word or words that make the best meaning. Each sentence completed with entire correctness counts 3. A substantially correct completion will count 1. 2 will be subtracted from your score for each foolish or irrelevant completion of a sentence.

1. A body of .....entirely surrounded by.....is called an.....

2. It is.....that a full-grown man should.....a ghost.....he is.....

3. His friends,.....wished to dissuade him from this undertaking, asserted that..... he followed their advice.....would withdraw their support.

4. The struggle for.....among the lower.....has.....a commonplace of modern scientific thought.

5. Two.....of practical efficiency may be applied to the.....of the city: What does it provide for the people and what.....it.....the people.

6. And now.....all.....introduction.....us go.....at our question.

7. History..... .....assisted and recorded memory.

8. Ideas distinguish.....from all animals, and all.....significant in .....history..... be.....back to ideas.

9. We know that power.....purify men in despotic governments, but we talk..... it..... .....so in free.....

10. The laws of nature are given.....my wishes.

11. Want of uniformity in private law and methods of.....is an evil..... minds will.....by different.....

12. Let the class that.....itself to transportation, for example,.....working and the disastrous.....to the rest of the.....can scarcely.....imagined.

in school, or as money-makers, or as lawyers, or as carpenters, or as teachers of children, and then measure their intellect by some suitable series of tests and observations, we can determine how closely success in any line goes with the degree of intelligence shown by the test-score.

For example, consider the significance of abstract intelligence for success in schoolwork. If we take a thousand children twelve years old we may measure the success of each in schoolwork by the grade he has reached and by the quality of work he is doing in that grade. If we measure these same children with an adequate series of tests made up of giving the opposites of words, supplying missing words in sentences, solving practical problems, following directions, and putting facts in their proper relations, we have as a result a diagram which shows the *resemblance* or *correlation* between intelligence score and success in school in the individuals in question. The amount of the resemblance—the closeness of the correlation—is measured with great exactitude by a *coefficient of correlation*, called *r*, a number derived by suitable calculation from the thousand pairs of scores. This number varies from +1.00, or perfect correlation, to −1.00, perfect antagonism. Such coefficients of correlation are the shorthand in which science sums up the extent to which two things go together. The significance of intelligence for success in a given activity of life is measured by the coefficient of correlation between them.

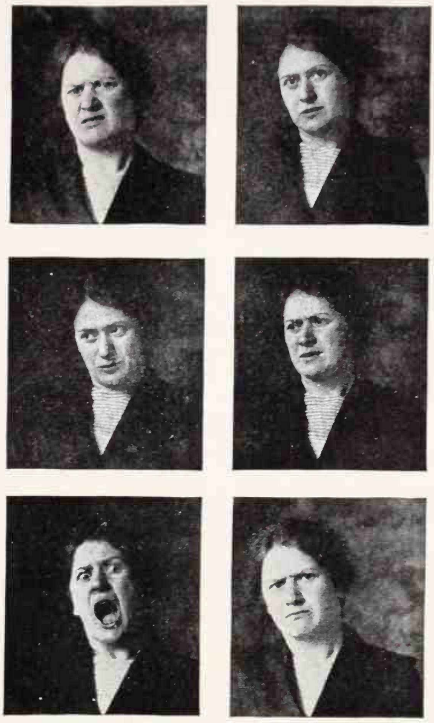

FIGURE 2

Scientific investigations of these matters is just beginning; and it is a matter of great difficulty and expense to measure the intelligence of, say, a thousand clergymen, and then secure sufficient evidence to rate them accurately for their success as ministers of the Gospel. Consequently, one can report no final, perfectly authoritative results in this field. One can only organize reasonable estimates from the various partial investigations that have been made. Doing this, I find the following:

Intelligence and success in the elementary schools, r = +.80.

Intelligence and success in high-school and colleges in the case of those who go, r = +.60; but if all were forced to try to do this advanced work, the correlation would be +.80 or more.

Intelligence and salary, r = +.35.

Intelligence and success in athletic sports, r = +.25.

Intelligence and character, r = +.40 or more.

Intelligence and popularity, r = +.20.

Whatever be the eventual exact findings, two sound principles are illustrated by our provisional list. First, there is always some resemblance; intellect always counts. Second, the resemblance varies greatly; intellect counts much more in some lines than in others.

The first fact is in part a consequence of a still broader fact or principle—namely, that in human nature good traits go together. To him that hath a superior intellect is given also on the average a superior character; the quick boy is also in the long run more accurate; the able boy is also more industrious.

There is no principle of compensation whereby a weak intellect is offset by a strong will, a poor memory by good judgment, or a lack of ambition by an attractive personality. Every pair of such supposed compensating qualities that have been investigated has been found really to show correspondence. Popular opinion has been misled by attending to striking individual cases which attracted attention partly because they were really exceptions to the rule. The rule is that desirable qualities are positively correlated. Intellect is good in and of itself, and also for what it implies about other traits.

The second fact—that intellect varies in utility according to the work to be done—has permitted a very wide diversity in opinions about its utility. Ordinary observation of life is beset by such variety and complexity that persons of generally good judgment can be found who will rate the importance of intellect for success in, say, business, or art, or politics, almost all the way from 0 to 100 per cent. Only the painstaking investigation of each such problem can give the correct answer.

The correct answers will put an end to numerous superstitions and fancies about human achievement. About a generation ago America was obsessed by the superstition that money-making had a correlation of from +.80 to +1.00 with general intelligence and good-will, so that to get a representative of the people in Congress, or a trustee for a university, or a vestryman of a church, or a member of a commission on public health or charity or schools or playgrounds, you should look about for a man who had made a great deal of money. To-day the world is being assailed by the much more foolish superstition that money-making is correlated 0 with general intelligence and about −.80 to −1.00 with good-will, the maker of great profits being no more fit intellectually to run his business than his barber is, and being diabolically eager to amass dollars at the cost of misery to anybody who gets in his way and to all innocent bystanders.

Exact and complete knowledge about the correlations of mental traits will be of enormous importance for the utilization of man-power by schools, churches, employers, and the state. When we have such exact knowledge, we shall be able to make up a bill of specifications of the sort of intellect and character required for a certain job, select men efficiently instead of haphazard, and train them according to their individual needs instead of indiscriminately.

The present waste is great, both in efficiency and in happiness. W. P., whose I Q is 83, is being forced through high-school to college by his father. W. P. gets nothing but confusion and misery from his high-school work and is growing a little more inactive, sullen, and idle each year. He wants and has wanted to be a gardener, and could probably succeed and be useful to the world as such. There is not one chance in a hundred that he will graduate from college or get any good from college studies. L. C. was promoted to be foreman of the shop merely because he was the most skilful workman. He possessed very little social intelligence and was unhappy and inefficient in the new job. The management, realizing that it was to blame, continued him at a foreman's salary, but gave him a special mechanical job. P. S., a field salesman of extraordinary success by virtue of his great popularity, energy, and personal tact in face-to-face conferences, was promoted to be in charge of planning sales campaigns and selecting and directing the staff of salesmen. He failed, being only mediocre in general intelligence, and unable to understand the plans of the manufacturing department or teach his subordinates. In selecting these, also, he sometimes mistook "sportiness" for popularity and pleasant manners for real tact.

Knowledge of the correlations of mental traits will also be a protection against many unsound, impracticable theories of business and government. Consider, for

example, the correlation between intellect and character. Dickson and Terman found, in the case of little children, that the I Q of abstract intelligence had correlations with the teachers' ratings for persistence, conscientiousness, co-operativeness, industry, courage, dependability, and unselfishness of from +.30 to +.50, with an average of +.41. Chassell has found, in the case of college students, correlations between intelligence and unselfishness, loyalty, justice, courage, self-control, reliability, and activity for social welfare, averaging +.40. Woods, rating some six hundred members of European royal families for intellect and for character, finds a correlation of about +.40. No impartial student of the matter has found any contrary result. The abler persons in the world in the long run are the more clean, decent, just, and kind.

To this feature of human nature which has tied good-will toward men to ability, a large proportion of the blessings which the common man enjoys to-day are due. The brains and ability of the world have been, and still are, working for the profit of others. If Pasteur had been of mean and brutal nature he could have kept his first discoveries as a trade secret, extorted a fortune in fees, and lived in sensuous idleness, leaving the world without his still more important later work. Flexner or Carrel could poison their enemies and rivals except for the tradition of justice and generosity which the positive correlation between intellect and morality has made a part of scientific work, and which their own natures gladly maintain.

The correlation between intellect and character has in fact within a few hundred years produced so strong a body of customs that the world rather expects a gifted man of science to be a public benefactor. It would have been greatly shocked if William James had given up psychology to establish a lucrative organization of spiritualistic mediums over the country, or if the Mayo brothers had retired from medicine to direct a chain of Mayo drug-stores!

The peasants of France did not themselves extort democracy from Louis's autocracy. They were led by intelligent aristocrats. The Russian serfs did not secure their own freedom. Africans did not abolish the slave-trade. In at least three out of four social reforms the reform is initiated and put through largely by leaders from above, men of high intelligence who act, often against their own selfish interests, for the common good. Many men of great intelligence will, of course, be unjust and cruel tyrants; the correlation is .40 or .50, not 1.00; the direction of the world's affairs by men who were guaranteed to be both of great ability and of fine impersonal devotion to the world's welfare, would be best of all. But, in the long run, it has paid the "masses" to be ruled by intelligence. Furthermore, the natural processes which give power to men of ability to gain it and keep it are not, in their results, unmoral. Such men are, by and large, of superior intelligence, and consequently of somewhat superior justice and good-will. They act, in the long run, not against the interest of the world, but for it. What is true in science and government seems to hold good in general for manufacturing, trade, art, law, education, and religion. It seems entirely safe to predict that the world will get better treatment by trusting its fortunes to its 95- or 99-percentile intelligences than it would get by itself. The argument for democracy is not that it gives power to all men without distinction, but that it gives greater freedom for ability and character to attain power.