

INFLUENCE OF HEREDITY AND ENVIRONMENT

Love is Blind, But With Due Parental Care Can Be Guided Into Safe Channels

Dr. Frederick L. Hills, of the Bangor State hospital, recently spoke on Heredity and Environment before the Mothers' club in Bangor High School in part as follows:

In plants, color, hairiness or smoothness, resistance to disease, long or short stipes, are among the characteristics inherited, and in man may be mentioned color of eyes, early appearance of the hair, certain peculiarities of the skeleton, certain diseases, outbreak of temper, etc. These are known as dominant traits.

Recessive Traits
Others known as recessive traits are lack of pigmentation, deaf mutism, imbecility, some forms of insanity, some nervous diseases and some mental traits.

In the practical application of this theory we have to consider several traits at the same time, some of which may blend and some of which may neutralize each other, and the result of a union depend upon what good or bad traits are dominant and what are recessive.

The theory of Weismann bears upon the make-up of the parent germ cells. He maintains that the germ plasma which the parental ovum contains is not used up in the formation of the offspring, but is reserved for the formation of the germ cells of the following generation unchanged. Characters will appear in the offspring reminiscent of both parents, but some may be latent and not appear until later generations. The application of these theories to the human race has cleared many of the mysteries surrounding heredity and has seemed to place our knowledge of the subject upon a firm scientific foundation.

Prof. Adam has divided conditions truly inherited into four classes—specific, racial, familiar and individual. Specific inheritance is shown by the law that features longest possessed by a given stock are the ones most impressed upon that stock and the least easily lost. A large peculiarly shaped nose may be a characteristic to a certain family and re-appear for generations. Racial inheritance is seen in the similarity of physical mental and moral make-up of all the people of different races—English, Germans and Jewish; for example showing their typical racial characteristics.

Traits Ancestors Give Us
Family inheritance is manifested by the reappearance in successive generations of similarity in form and feature and of certain intellectual traits. Individual inheritance includes all these and in addition to these characteristics peculiar to the parent as distinct from the family, or of characteristics not present in either parent, but resulting from the interaction of the two parental germ plasma. Some of

the characteristics known to be traceable to heredity along family lines features, color of the hair, eyes and skin, stature, weight, energy, endurance, quickness; defects of many kinds such as those of the nervous system, speech, eyes and ears, baldness and defects of various bodily organs. This does not mean that all shortcomings are inherited, but that the type of organism is inheritable which lacks resistance to germs and other factors which bring about disease.

Mental Traits
Mental Traits:—Among the mental characteristics known to arise from heredity sources may be mentioned musical, artistic and literary ability, mechanical skill, retentive memory, fluency in conversation, aptness in languages, attention, etc. Also, certain forms of insanity, epilepsy and feeble-mindedness.

Moral Traits
Moral Traits: On the moral side we find as inheritable qualities, generosity, piety independence industry faithfulness, will power, self-reliance, impulsiveness, temperance, sympathy, etc. The same may be said of unusual traits such as criminality, delinquency, vanity, cruelty, cunning quickness to anger.

Our Personalities Fore-Ordained
Thus, we see that our whole make-up, physical, mental and moral, is fore-ordained to a large extent by the characteristics of our ancestors. We are a complex combination, in our individuality of the characters of those who have gone before and because the combination is so complex we are not likely to fall heir to all their bad traits any more than to all their good traits. Even the feeble-minded inherit in many cases, along with their defective mental makeup good traits of kindness, gentleness, generosity, etc., or an ability for mathematics or along musical or artistic lines.

Blind Tom's Accomplishments
A few years ago, a negro imbecile, Blind Tom, travelled extensively in the eastern states demonstrating a remarkable musical ability, being able after a single hearing to reproduce even complicated music on the piano. Mentally, he was a child, difficult to control and so pleased with an accomplishment that often after playing he would spring up and applaud himself rapturously.

Law of Compensation
Persons possessing weak physical make-ups, may possess strong mental capacities and vice versa. Persons of superior mental capacity may lack loftiness of character. Each trait in the mosaic of one person is transmitted or not transmitted to a child according to the mating of that particular trait—mating with trait or lack of trait rather than according to the mating of the two persons as a whole; that is, when a man and woman marry and bear offspring, it is not the mating of two units, but the mating of myriads of pairs of units, the units being the constituent traits and lack of traits contained in the germ plasma, each trait mating producing its own trait offspring and the collection of these trait offspring making up the child.

In the marriage of relatives such as cousins the mating brings together like groups of traits, thus strengthening the existence of those traits whether good or bad. When the family possesses traits of mental ability cousin marriages may result in children who are geniuses, but cousin marriages when the family line possesses traits of mental inability, may result in children who are mentally defective.

Few Diseases Inherited
We know that only a very few diseases are really inherited. What is inherited is a certain lack or weakness in the chemical and structural make-up of the body as a result of which the offspring are made susceptible to disease when subject to infection or to those conditions in life which would foster its development. Tuberculosis is not hereditary, but the child of a tubercular parent inherits a type of bodily structure which, in combination with congenital and post-natal influences favors the development of the disease, the exciting germ of which is everywhere present. The same is true of syphilis and alcoholism.

How Alcoholism Runs
Alcoholism is seen in many members of the same family line, not because alcoholism is hereditary, but because the alcoholic possesses a poorly developed nervous organization, weak will and suggestibility which he does transmit to his offspring and which renders the latter an easy victim to habit formation, which manifests itself in some degenerate tendency, as alcoholism,

drug addiction, criminality, immoral living etc. If an alcoholic marries a person whose family line possesses well marked traits of an opposite nature, strong will, good mental poise, longevity, etc., the tendency to the habit formation would be less evicent in the offspring and bad traits would tend to disappear.

The same can be said relative to those forms of insanity in which heredity seems to pay a part, as well as of feeble-mindedness and idioy.

Normal and Feeble Minded
Suppose that a normal minded person marries a feeble minded person. Assuming that the normal minded person comes of a stock in which this trait is dominant, all the children will be normal, none will be feeble minded. Yet, all these children who seem perfectly normal lack something in their bodies. This deficiency is simply covered up but can crop out in later generations. If two of these hybrids between the weak minded and the normal minded stocks marry each other, one-quarter to the children will be feeble-minded, one-quarter thoroughbred or normal and the remaining half, though apparently normal, will carry the taint in them, just as their parents did on the other hand, if two feeble-minded people marry, all the children will be feeble-minded, but feeble-mindedness is a recessive quality, so that if feeble-minded marry only with normal individuals, the feeble-mindedness does not blight the next generation and if the apparently normal (hybrid) children of such marriages are careful to marry only normal individuals, avoiding the feeble-minded or those with tainted ancestry

like themselves, there will be no feeble-mindedness in the future generations.

We Inherit Good Things
In thinking of heredity, we are apt to let our minds dwell upon the bad things that can thus be brought into life and to overlook the good that quite as often comes from the survival dominant traits of the better sort, neutralizing and killing out the evil.

Genius is Hereditary
The heredity to gentleness, general bodily soundness, of physical endurance, of memory, of self reliance, of high moral ideals has not been studied so painstakingly as has the heredity of defectives, but we know that these things are just as surely hereditary and that more care in the selection of the parents of our children with these things in view, will tend vastly to the improvement of the race.

Thought and Matrimony
The wider knowledge of these things the better they are understood and their significance realized by the community at large, the more will there grow up a tendency to thoughtfulness in the assumption of the marriage relation, and though love is blind, he will come instinctively to crave the better things and subconsciously to be guided away from committing those follies that he cannot see.

Heredity vs Environment
It is often difficult to say how much of the physical, mental or moral fitness or unfitness of any individual is due to heredity and how much to environment. The influences of environment are at work from the moment of conception or influence the whole life history of the offspring. Pre-natal conditions may produce abnormal development and lead to infections, especially tubercular and syphilitic. The periods of infancy and childhood, during which rapid development in all three spheres is taking place are prolific of influences moulding their physique, building the character and directing the moral trends, all of which are to combine with hereditary influences to make up the individual life. In the physical sphere we see the influence of environment upon the future health. It is thought that most cases of tuberculosis are the result of in-

fection with the germ in infancy or early life, the disease remaining latent until some conditions of ill health, unhygienic living, etc., so weakens the natural body resistance as to favor the development of the disease.

First Few Years Important
The nervous makeup of a child is greatly influenced by the environment of the first few years of life. A nervous child of nervous parents might, by a change of environment become less nervous. It is probable, says Dr. Beverly Tucker "that a new born babe of Norway if taken away from its parents to live in Italy would modify many of its inherited traits in this new environment. Just as the fair skin would become darker, the stolid bearing would tend to become inflexible, thriftless would probably be lost and it would become more emotional, more artistic more graceful, more easily excited and perchance, more neurotic."

Environment Influences Heredity
A child comes into the world with its plans for existence drawn, by heredity; in the dry dock of environment it assumes certain characteristics and these depend much upon the material used and the influence of the builders. A ship built in Japan by the same plan of one built in England would contain different wood, steel and even paint. In other words although the same plan was followed some Japanese characteristics would be worked into it. The fitness of the ship might be further altered by the builders of either country putting in here and there a bad piece of material or even willfully destroying or changing some of the specifications of the plan, all of which would affect its sea-worthiness. So, with the child disease might destroy a part of its fitness, gnarled and warped ideas imbued from those in charge of its rearing might change its plan and an individual destined by nature to battle with the storms and stand the stress of life may, because of environmental circumstances and influences, be rendered unfit.

Nervousness
The infant of a few weeks of age whose parents begin to feed it too often, handle it too much and keep it in an atmosphere of indulgence and excitement, is liable to become the (Continued on page 7)

Your Very First Baking

with Beaver Flour, will show you the difference between this perfect blended wheat flour—and the usual western spring wheat flours.

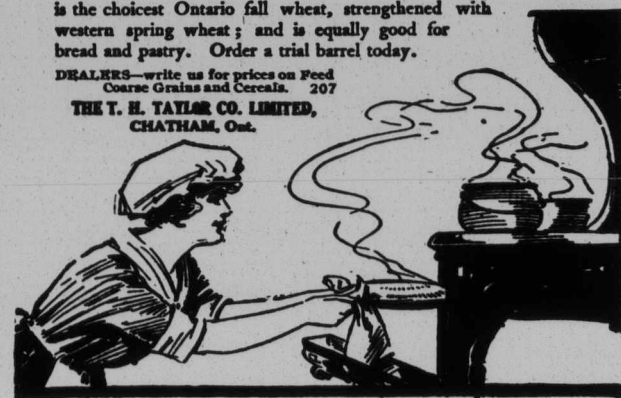
The light, flaky Pie Crusts, Cookies and Doughnuts—the delicious, "homey" nutlike flavor of the Bread and Rolls—will be doubly welcome after the tough, almost tasteless bread made with western spring wheat flour.

BEAVER FLOUR

MILLED OF BLENDED WHEAT

is the choicest Ontario fall wheat, strengthened with western spring wheat; and is equally good for bread and pastry. Order a trial barrel today.

DEALERS—write us for prices on Feed Coarse Grains and Cereals. 207 THE T. H. TAYLOR CO. LIMITED, CHATHAM, Ont.

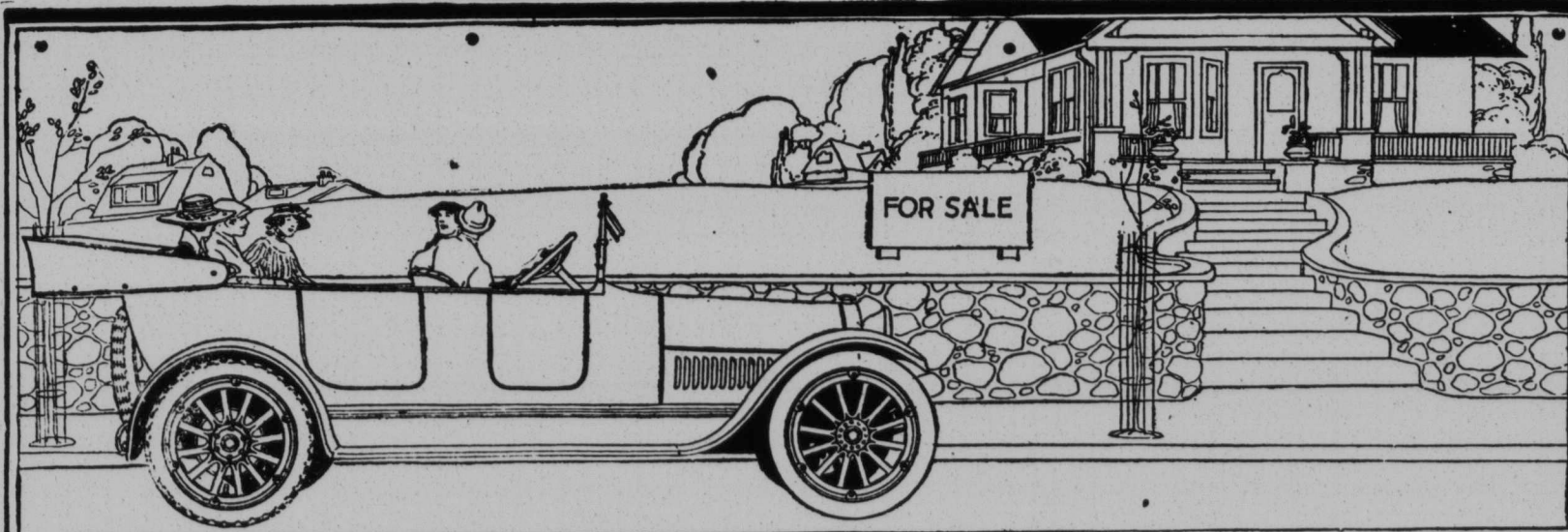


GEORGE BEBAN
IN
"THE MARCELLINI MILLIONS"
MOROSCO-PARAMOUNT

Happy Hour Friday and Saturday

Every 10c Packet of
WILSON'S FLY PADS
WILL KILL MORE FLIES THAN \$8.00 WORTH OF ANY STICKY FLY CATCHER

Clean to handle. Sold by All Druggists, Grocers and General Stores.



Buy your car as you would buy your home

LOOK at the buying of your car as you would look at the buying of your home. You can find a house at almost any price you would care to pay. But there are certain necessities you must have if that house is to be a home. You wouldn't, for example, try to get along in tiny, cramped up, uncomfortable rooms. Neither would you live in a house with cheap plumbing, inferior woodwork, ill-fitting doors and rattling windows.

Without going into luxuries, there are certain necessities you must have to justify your calling your house a home—a place you will be proud to own.

It is the same with your car. It must have a certain amount of size, roominess and wheel-base to make it really comfortable and free you from the need of constant apologies. It must have materials of a certain quality to insure its lasting the proper time to justify your investment in it. It must have the proper weight to make it hold the road. It must seat all its passengers in comfort.

You wouldn't buy a house that lacked the real necessities because it cost a few dollars less. Even so it is false

economy to buy a car that lacks the essentials of motoring satisfaction because it is cheap to buy.

In the Series 18 Studebaker Cars you get all the needed essentials of complete motoring satisfaction at the lowest possible price.

When you realize that Studebaker, one of the largest producers of cars in the world, enjoying all the economies of great production and great resources, makes a smaller percentage of profit per car than the small car manufacturers, it is obvious that Studebaker includes in its cars those features that small cars must curtail; and quality, both of material and workmanship, that you cannot reasonably expect to find in small cars at their prices.

What is a small initial saving compared to a great sacrifice? Be wise—before you decide what car to buy see the Studebaker.

Nearly every automobile manufacturer has made an increase in prices, but Studebaker prices still remain the same as they were last Spring. This further increases the value of Studebaker cars in comparison with all others.

The increased cost of materials and labor may force Studebaker to make an advance in prices at any time without notice.

Studebaker

Built in Studebaker factories at Walkerville, Ont.

THE LOUNSBURY CO., LIMITED
DISTRIBUTORS

Four-Cylinder Models
FOUR Roadster - - - \$1375
FOUR Touring Car - - - 1375
FOUR Sedan Roadster - - 1635
FOUR Every-Weather Car - 1675
All prices f. o. b. Walkerville

Six-Cylinder Models
SIX Roadster - - - \$1685
SIX Touring Car - - - 1685
SIX Sedan Roadster - - - 1900
SIX Touring Sedan - - - 2245
SIX Coupe - - - 2310
SIX Limousine - - - 2630
All prices f. o. b. Walkerville

LISTEN TO THIS! SAYS CORNS LIFT RIGHT OUT NOW

You reckless men and women who are pestered with corns and who have at least once a week invited an awful death from lockjaw or blood poisoning are now told by a Cincinnati authority to use a drug called freestone, which the moment a few drops are applied to any corn, the soreness is relieved and soon the entire corn, root and all, lifts out with the fingers.

It is a sticky ether compound which dries the moment it is applied and simply shrivels the corn without inflaming or even irritating the surrounding tissue or skin. It is claimed that a quarter of an ounce of freestone will cure very little at any of the drug stores, but is sufficient to rid one's feet of every hard or soft corn or callus.

You are further warned that cutting at a corn is a suicidal habit.

MINIMIZE THE FIRE PERIL By Using EDDY'S

Chemically Self-extinguishing
"Silent 500's"

The Matches with "no after glow"

EDDY is the only Canadian maker of these matches, every stick of which has been treated with a chemical solution which positively ensures the match becoming dead wood once it has been lighted and blown out.

Look for the words "Chemically self-extinguishing" on the box.