

NEW DISCOVERIES ALL OVER THE EARTH

Where Our SURNAMES Came From

WHAT'S in a name—your name, for instance? There are only four general classes of English surnames. Fifty per cent of these are derived from the two sources of place or locality and of occupation. Many of these names offer no problem, meaning just what they say. For example, Hill and Dyer. But there are many others whose present spelling gives no hint of their origin.

Good examples of these obscure name-meanings are found in Hyatt—local English speech for high-gate; and, Calvert—literally calf-herd, one who herds calves. In English mediaeval times and for generations after there were no hard and fast rules for spelling. And as there were different dialects for nearly every county in England, phonetic spellings were naturally different. To complicate matters the Norman invasion imported hundreds of French names of all kinds and derivations, which suffered a score of different kinds of corruptions. The Scandinavian invaders, too, had left their mark in names from that language. The whole mass of names was tinted with those of Latin, old Anglo-Saxon, German, Gaelic and Celtic origin. During succeeding centuries accepted spellings of names changed as their pronunciation changed, often becoming simpler and sometimes losing the last clue to their original meaning. To trace modern family names back to their source is a task which many philologists have set for themselves. Quite a number of books have been published on the subject, each adding something to the results shown by their predecessors. The most recent of such volumes, highly interesting in an explanatory way and bearing evidence of scientific methods, is called "The Romance of Names." Its author is Ernest Weekley.

OCCUPATIONS and PLACES Responsible for the Way Many Families Were Named



The Name Travers and Travis Came from the Term Used to Describe a Road Branching Off a Main Highway.



The Name Smith, with its Various Combinations, Was Derived from the Occupation of the Mediaeval "Smithy"—a Worker in Iron or Other Metals.



The Name Hyatt is Old English for High Gate.

FULLER—From the French "fouler," to trample; with Walker and Tucker, derived from the process of finishing woolen cloth. GALE—From the English gaol, a place of confinement. GARDEN—From the Scandinavian "garth," meaning yard. Applegate (of which Applegate is a corruption) and Wynyard (vineyard) are from

MERCER—Literally limited to the silk trade, but formerly was the English for a dealer in any kind of merchandise. METCALF, MEADOWCROFT—Different English dialects for the same name, denoting a pasture locality. NORCOTT—From the English cot or cote, a humble dwelling, and a prefix standing for north. Other surnames formed in the same way are Coates, plural of cote; Kingscote; Alcott, oldcote; Caldecott and Calcott for coldcote. NORRIS—From old French "norsie," nurse or foster mother. NUTTER—Not one who gathers nuts, but from old English neatherd, one who herds cattle, in the north pronounced nowtherd. OSLER—From French "oiseleur," bird-catcher; also the old English names Burder and Fowler. PACKARD—From Picaud, a native of Picaudy, France. PALLSER—From the occupation of pallister, a maker of pallings.

M.A., head of the modern language department at University College, Nottingham, England. It is published by E. P. Dutton & Co., New York. BAILEY—Meaning an occupative and place family name, with their derivation, is made up of names that fall to speak for themselves in modern terms. As here defined they will furnish clues to the origin of many others. ARKWRIGHT—A maker of bins or arks as they were once called. ARMOUR—Armourer, a maker of armour. BAILY—Meaning a person in possession, as a bailiff. BICKNELL—From the English village Bickenhall, or Bickenhill. BRIGGS—North of England dialect for bridges. CARRUTHERS—The name of a hamlet in Scotland. CHAPMAN—Old English for a small merchant who sells cheaply. CHEETHAM—The name of a place now a part of Manchester, England. CHESHOLM—From the Scandinavian "chis," a pebble, and "holm," a river island. COWPERTHWAIT—North of England dialect: "cowper," copper; "thwaite," to cut. CULPEPPER—An old English occupation name, meaning literally to gather pepper berries. CUTLER—One who makes cutlery, from old French "coustel," knife.

DIPLOCK—From North Britain pronunciation of deep lake. DOLITTLE—Derived from the obvious meaning of its compounds. DYER—Modern form signifying the occupation of dyer; from the Anglo Saxon feminine, "dighster," the name Dexter is derived. ECCLES—A Celtic surname derived from the Greco-Latin "ecclesia," of floors of the church. EWART—From the old English ew-herd, herder of ewes. EYRE—Phonetic old English for heir—also Ayre and Ayres. FALLOWS—Derived from land that is fallow. FARADAY—Old English for a way-faring or travelling laborer; day was the word for laborer, coming from the root of the German word meaning to serve. FARRAR—From farrier (French "ferrier"), one who shoes animals with iron (Latin, "ferrom"). FAULKNER—From falcner, a dealer in hawks. FAUCETT—From the Scandinavian "force," a waterfall, by an accidental spelling; whence also "faucet," a water-tap. FLETCHER—A maker of arrows, from the French "fleche."

the same general source. GLYNN—From the Celtic glin; one of many surnames derived from words naming features of natural scenery—as Lynn, a cascade, and Crak, from crag. GRANGER—From the French "grange," a barn. GROSVENOR—From the French "gros veneur," great hunter, applied to a royal servant. HALL—A name due to residence near the "Hall," or great house of the English neighborhood. INGLIS—Early Scotch for English; at the same time Scott is an English name, Escot, borne by a Norman family beyond the border. INMAN—From an inn servant; derived in the same way as hostler from the French "hosteller" (modern form, "hoteller"). JANAWAY—Local English dialect for the Italian city of Genoa. JARDINE—From the same source as Gardiner, adapted from the French "Jardin," garden. JUKES, JUDKINS—English local surname forms derived from Jordan, river. KNAPP, KNOWLES—Local English for knoll or hillock. LACEY—In the Domesday Book, de Lael, from the Norman hamlet of Lassy. LANYON—A Cornish surname, derived from "lan," a church, and meaning churchman. Other Cornish names will be recognized by such prefixes as: Pen, hill; Pol, pool; Tre, settlement. LATIMER—English local speech for Latiner, one skilled in Latin. LORIMER—From the Latin "lorum," bridle-rein; a bridle-maker. LESTER—English phonetic for the town for Leicester.

LIGHT Your BATH from ABOVE

If you want to avoid the danger of being accidentally electrocuted, never take a bath in a room where the electric lighting fixtures are installed in such a way that they can be reached when you are standing or sitting in the tub.

This is the advice given by scientists who have been investigating the large number of accidents from electric shock occurring in bathrooms.

There is peculiar danger, it is found, from coming in contact with an electric current while taking a bath owing to the fact that when the surface of the body is moist it offers less resistance to the current than when dry.

Under such conditions currents of as low tension as

46 volts may give one a severe shock or even cause death.

Those who have studied the subject strongly advise against the widespread practice of installing electric lights in side walls at such a height that they may be touched by a person standing in the tub or on the floor.

The only safe place for electric fixtures in the bathroom is close to the ceiling, so that they can be operated only by turning a perfectly insulated flush switch just inside the door.

Derby hats have been found to be another fruitful cause of death or serious injury by electricity. The steel wire which forms the framework of every derby makes the best possible conductor for an electric current. This is why electricians and others whose work brings them close to high-power currents are cautioned never to wear derbies.

ONE DEATH in Every 100 Due to MEASLES

MEASLES has not generally been taken seriously. Indeed, a certain health officer is quoted as recommending that strong, healthy children, under careful control, should contract measles "to escape the malignancy of the disease in adult age."

Yet according to a recent study by Dr. F. S. Crum, one per cent of all deaths may be traced to measles, and from one to six per cent of all cases of measles are fatal.

The disease chooses its victims especially from children under ten years of age, but occasionally attacks an adult. It shows no preference of sex, locality, race or climate, but since the time when any records were kept of

cases of death "has levied a heavy toll on the population of all civilized countries."

"There are," says Dr. Crum, "authentic records of great epidemics of measles in England and Scotland from the early part of the seventeenth century; and after Sydenham's description of the London epidemics of 1670 and 1674, there remains no doubt of the more or less continuous and wide havoc wrought in Great Britain and Europe by this particular form of eruptive fever. Epidemics of measles were frequent, widespread and fatal throughout the eighteenth and nineteenth century."

Some charts prepared by Dr. Crum show a century of averages of deaths from measles computed for periods of ten years. Among children under ten years the highest rate occurred in the decade 1882-1891; the lowest in that of 1902-1912. Yet, it is stated, measles is now more widely diffused, even in the rural districts, than in the fifties and sixties of the nineteenth century.

Records from fifteen American cities show epidemics of measles, recurring with quite a degree of regularity at intervals of from three to

five years. The death rate from measles is greatest during the spring months, although the percentage rises again in November.

One chart, based upon conditions in Glasgow, contains an especially significant message for many a city of any land. In the Scottish city a close relation was found between the number of cases of measles and housing conditions. Where the children belonged to families living in one-room tenements the rate was ten times as high as where the families lived in three or four rooms or more.

One reason why measles is so difficult to control is the fact that medical science as yet has only an incomplete knowledge of the virus by which the infection is carried. Other reasons are found in the high contagiousness of the disease and the fact that a patient is capable of infecting others before the characteristic eruption has made its appearance on his own body.

It is the height of folly to regard measles as harmless. It is a disease that is serious both in itself and in its frequent complications and after effects.

Why We OUGHT NOT WEAR NIGHT CLOTHES

DON'T sleep in pajamas or a night dress. If you think you must, use the very thinnest, sheerest material that can be found.

Our present system of clothing with tight-fitting hats for men and hair coiled on the head for women gives rise to headaches; high collars interfere with the functions of the thyroid gland and cause nervousness; the woman's corset and the clasping embrace of a man's suspenders or belt keep the air from the body; clothing that prevents a current of air from cooling us and tight shoes made of leather which absolutely prevent the needed evaporation from the sudorific glands between the toes—all are injurious to health.

Many people would rather suffer headaches than "seem queer." Many a man will do himself to nervous strain rather than have his fellowmen think him careless or slovenly. It is unfortunately true that unhygienic clothing is the rule, and we should be regarded as faddists if we were entirely to break away from custom. Most people do not consider good health worth the penalty of popular disfavour.

Fortunately, however, the strictures of our neighbors cease with the privacy of one's own room. Here, at least, during the night, there is no need to keep out the life-giving air, no need to prevent the elimination by evaporation of the waste products of the body. Women are much more sensible than men in this respect, for their night wear is usually thinner and more flimsy and frequently contains much lace insertion which adds to the aeration.

A night dress to be healthful should always be sleeveless because of the glands under the armpit, and, when possible, should be made like a cloak to open all the way down the front, perhaps fastened across the bosom by a single ribbon. Moreover, this fastening should be loosened before finally settling for the night.

Pajamas, from the standpoint of health, are an abomination. For a commercial traveler sleeping in a different bed every night, a Summer cottager or tent-dweller, exposed to the sudden changes of temperature at night, or in similar conditions, pajamas are a wise

precaution against taking cold. But to most men living in cities and towns the modern custom of wearing night clothes—it is scarcely more than a couple of centuries old—should be abandoned. A man should go to sleep, as his forefathers did, robed in nothing more than his own freshly-bathed skin.

How to Keep Your CHILDREN from Being NERVOUS WRECKS

A CHILD is not an adult in miniature. From the moment of birth until full adult life there is one continuous change. The brains of children are large, but contain a high percentage of water. Certain brain cells are not present at birth. The development of those that do exist and the formation continue until maturity.

For the first seven or eight years the brain develops rapidly in structure complexity, then the growth becomes slower.

In quite as marked a manner the nerve fibres and cells and the spinal cord itself develop their maturer functions. At birth the spine is broader and shorter, although the spinal cord extends lower than in the adult.

It is very supple and easily twisted. The nervous system goes through a prolonged and complex change and does not become "ripe" until maturity.

The brain grows more during the first two years of life than during all succeeding years. In infancy the body fluids are unstable and their equilibrium easily disturbed, and not until about the fourth year does the consolidation of the body begin, part of the spine not becoming ossified until after the eighteenth year.

I will be easily seen that the child has quite enough to attend to in order to develop in a healthy manner without being expected to entertain its elders by amusing tricks, by being kept awake evenings because it is so cunning, or because it suits the convenience of its elders to take it to places of entertainment.

If a child is nervously excited, irritability follows, and repetition or continuation of the condition causing irritability is liable to cause serious injury to the nervous system. The nerve centres must have rest and quiet and food just as a seed must have rest and quiet and food to grow into a healthy plant. To disturb the roots every few days or even a few times would cause it to wither and die. Similarly the young child must be shielded from inconsiderate treatment.

Bright colors on the nursery walls should be avoided, as they are over-stimulating to the brain. Romping with little children—especially under a year old—until they jump and shout with excitement, should be forbidden. As bedtime approaches the atmosphere should be soothing and peaceful. The child is tired anyway, and a very little stimulation may carry him over the border line of nervous irritability. The child is then described as cross, when in reality it is snined against rather than sinning.

Nervous diseases among children are on the increase, due doubtless to the ignorance of mothers concerning the hygiene of the nervous system. Sufficient sleep, quiet, fresh air and suitable food are essential.

Dr. Holt is authority for the opinion that a young and healthy child should sleep from sixteen to twenty-two hours out of the twenty-four. During the first six months the average sleep required will be from sixteen to eighteen hours a day. At a year old the child will aggregate fourteen or fifteen hours; at two years, thirteen or fourteen hours; and at four years, from eleven to twelve hours. While from six to ten years children should have ten or eleven hours sleep, and from ten to sixteen years, nine hours should be the smallest amount per-

missible. Of course, with younger children the time will be divided suitably into the regular night rest and daytime naps.

On account of the delicate body structure it is much better not to rock baby to sleep, to give him a pacifier or nipple to pull away upon, thus exciting stomach nerves, and to allow him to sleep with older people, to permit irregularity in his habits, to give food unsuited to his age, to allow him to lie wet and uncomfortable, or to excite him by attentions he is vastly better off without.

Clothes should never hamper. Change of position should be provided for in the case of young infants, also regular exercise in the bath, kicking on a blanket or bed, creeping, etc.

Improperly nourished children are likely to develop nervous habits, thumb or finger-sucking, pulling the ears, stuttering, stammering, while marked symptoms of disease may present themselves as a result of nervous derangement.

Convulsions, tetany, laryngo-spasm, breath-holding, epilepsy, chorea (St. Vitus' dance), spasmodic affections (as hiccough, nodding of head, wry neck, etc.), hysteria, headaches, disorders of speech, disorders of sleep, injurious habits such as dirt eating, nail-biting, head-banging, etc., are all listed under diseases of the nervous system.

The mother who nurses her baby must beware of becoming nervously tired or irritated herself, as this affects the milk secretion more than the diet she lives upon. The milk quantity is lessened by worry and the character quite changed. A baby should never be nursed for at least an hour after the mother has been mentally disturbed.

A Hall Where You CAN'T HELP HEARING

THE monster auditorium in the form of an ellipse. The elliptical George Washington Memorial which is to be erected in Washington will be the first hall of any size in this country to embody all the latest theories of acoustics.

The auditorium will seat 6,000 persons. The architects promise that everybody in this large audience will be able to hear distinctly a speaker's voice even though it be of only moderate carrying power. Only sufferers from deafness will have any reason for preferring front row seats to those in the extreme rear, for there are to be no "deaf spots" and none of the confusing echoes which destroy the usefulness of so many halls.

In their plans for this auditorium the architects have followed the advice of Professor Wallace C. Sabine, of Harvard University, one of the greatest authorities on the subject of acoustics.

At Professor Sabine's suggestion the auditorium will be built in the

domed roof which will be constructed of porous tile, especially adapted to absorb sound. This tile is a new invention which was used for the first time in St. Thomas' Church, New York.

Besides its excellent acoustics another feature of the George Washington Memorial will be its ample means of entrance and exit. The gallery, for example, will seat 2,000 persons and leading from it will be eight stairways wide enough to accommodate the entire seating capacity at one time.

YOU MIGHT TRY

When Making Potato Salad.

If potatoes are being cooked for salad, boil them with the skins on. They will be less soggy.

To Keep Fruit Cake Moist.

If you want to keep fruit cake moist for a long time, put a piece of bread in the tin box with it.

What to Do When YOUR BACK ACHES

WHEN you say of a backache, "It is nothing serious," you make a glaring error. The truth is few afflictions befall the body that are more serious than backache. What a cornerstone is to a house, a keel to a ship, its roots to a tree, the backbone is to the body, and when the back aches there is usually something wrong with the backbone. Not only does the long, curving spinal column hold the body together, but upon it depend the grace and rapidity of the body's movements. Besides it keeps up the connection and communication between the muscles and the brain.

That women complain more of backache than do men is due to their wearing tighter clothing and their habit of taking less exercise.

If you have a weak back strengthen it, and the way to strengthen it is to give it adequate exercise. Exercises will strengthen the muscles of the back, the backbone, the spinal

cord and so the nervous system. They must be well chosen and not too violent.

For women there is a simple exercise that, persistently followed for two to five minutes a day, will greatly strengthen the back. Sit on the floor, stretching the legs before you. Place the palms against the ankles, bring the palms together and slowly raise them until they are above the head. Then move them, still clasped, as far behind the head as you can. Bring them slowly back to the position from which they started.

A second movement for strengthening the back is to lie flat upon the floor, then rise slowly until the body rests upon the palms and toes, the back being arched, slanting from back to fore, as does a kangaroo's.

When she has become expert in this she can add value to the exercise by raising one leg on a level with the body. After considerable practice she can use the legs alternately with direct advantage to the spine.

Men, because of their greater strength, may benefit by heavier exercises, directed toward strengthening the spine. The backward kick is a good one for the beginner. Standing erect, with shoulders thrown back and hands on the hips kick vigorously backward, first with one leg, then the other. Begin with a half dozen repetitions of the exercise and as the muscles become accustomed to them repeat them fifteen times.

An exercise that strengthens the spine and the abdominal muscles, being of equal value for each, is to bend the body slowly forward and back from the waist. More difficult is the bending the body at the waist and turning it to the side, touching the floor with the finger tips or palms. Reversing the posture to the other side, repeat the exercise, which consists of three parts. First bending waist forward, turning the body sidewise, and last, touching the floor as described. This must be slowly and never too forcibly done.