

# Talking of Twins



Photos by International

By ELMO SCOTT WATSON

**I**F YOU want to get in the news pictures, be a twin! Many schools have won temporary fame because a picture has gone out bearing this familiar caption: "Sets of Twins in One School Puzzle Teachers" and the number which is inserted in that blank space varies from five to seventeen. A few years ago Stephens college at Columbia, Mo., already famous as "the Vassar of the West," won even more renown from the fact that it had in its enrollment no less than 18 pairs of twins, and that they had formed a unique organization, named the "Duplex club."

In St. Louis a year or so ago the press agent for a pair of "Siamese twins" who were appearing at a local theater had the happy inspiration to give a "twin party" to which all twins were invited. Sixty-five pairs, ranging in age from two months to forty-five years, were on hand with the result of an interesting group photograph—and much good publicity for the "Siamese twins." In New York the Fordham law school together, were graduated together, passed the state examinations together, were admitted to the bar together and the news photographers rushed to picture them together! Among the most publicized candidates for admission to West Point in recent years were the seventeen-year-old twin sons of a Pennsylvania soldier, killed near Chateau Thierry during the World War. When President Hoover nominated them for admission to the United States Military Academy, news stories (and a news picture, of course), recorded the fact that "their appointment is believed to be the first designation of twins ever so made."

But are twins such a rarity after all? Science gives an answer which you can interpret as you wish. It says that of every 1,000 babies born there are ten pairs of twins. That's 2 per cent. If you want to base your calculations on some of the much-publicized "twins in schools," you will find the percentage somewhat higher. A California school a year or so ago broadcast the fact that it had nine sets of twins in an enrollment of 300—that's 6 per cent. Similarly Logan, Iowa, reported 12 pairs of twins in an enrollment of 275—a little over 8 per cent.

But whether you consider these figures as evidence that twins are or are not such rarities, the fact remains that the study of twins has challenged the attention of scientists for many years, and some definite results to explain them have been accomplished, although the scientists are not entirely in accord in all conclusions. Two kinds of twins are generally recognized—the "fraternal" and the "identical."

"Fraternal" twins are children born at almost the same time, but the product of two life cells. They may be the same or opposite sexes, and frequently bear no more resemblance to one another than any brother and sister. They are simply a biological coincidence.

But in the case of "identical" twins, it is a far different matter; for they are produced by the splitting of a single life cell. They are invariably of the same sex and, furthermore, resemble each other amazingly, not only facially, in coloring and other physical details, but in mental processes, emotional reactions and in other subtle ways. They are literally two halves of a single personality.

Instances of remarkable resemblances between twins usually refer to the "identical" type, although it is generally conceded that there was no safe criterion for distinguishing between the "identical" and the "fraternal" until a Japanese scientist, Taku Komai of the Imperial university at Kyoto, Japan, announced his discovery of a method. Of it he says:

"In the course of study on my collection of fingerprints and hand and sole-prints of some twins, I have come to realize that, generally speaking, the same hands or feet of the identical twins resemble each other more close-



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1. To this Council Bluffs, Iowa, family goes the distinction of being America's "F. F. T." (Finest Family of Twins). They are Mr. and Mrs. Andrew Kroger and their ten children—five sets of twins. The twins are Clyde and Claude, born in 1912; Addie and Abbie, born in 1914; Floyd and Lloyd, born in 1919; Jean and Jeanette, born in 1923; and the babies, Donald Dean and Norma Jean, born in 1930.

2. Leo and Theo Bogart of Corvallis, Ore., have a double (no pun intended!) distinction. Not only are they twins but they are leap-year twins, having been born February 29, 1916. Although they are fifteen years old, they have been able to celebrate their birthday only three times! They are shown above holding the cup which they won at a recent "Twins Round-Up," held at Albany, Ore., in which 208 sets of twins took part.

ly in their patterns than the two hands or feet of the same individual.

"This statement holds good in principle also for several identical twins studied by others; while such a condition can never be found in twins of different sexes nor in twins of the same sex bearing evidence for their being fraternal twins. Thus, we seem to be justified in saying: 'Such twins are identical twins in which the same hands or feet of different individuals are more alike than the different hands or feet of the same individual.'"

"But this statement must not be taken as involving the notion also that, if the former resemblance is less than the latter resemblance, the given twins are fraternal, since there are some twins which are apparently identical and yet do not show the condition mentioned above. Anyway, this will probably serve as a criterion for identifying some identical twins.

"Some writers on twins and twinning seem to hold the view that the identical twins are comparable with the right and left halves of the body of one person. The view could not be quite correct, should it imply that the resemblance between the identical twins is in principle equal to the resemblance between the right and left halves of one person. As a matter of fact, speaking generally, the resemblance between the identical twins is more than that between the halves of one person. Aside from the fact that the viscera shows a marked asymmetry even among identical twins, there are several cases known where such twins have the same defect or abnormality on the same side of the body. Moreover, as mentioned above, the hands or feet of the same side of different twins show closer resemblance than the two hands or feet of the same individual."

But how does science account for twins, anyway? No one has ventured a positive answer, but it is generally believed that the process which takes place to produce twins is as follows:

The ovum, a single cell, is fertilized, and thereupon begins to divide—usually by twos—into many cells. Gradually these are differentiated into three types and form themselves into layers in the form of a sphere, the

middle of which is hollow, called the blastosphere. Up to this point the process is normal. For some reason not known, however, the blastosphere next begins to split. It is thought that this is possibly due to the fact that the cells on the inner layer expand much more rapidly than those on the outer and, naturally, the outer layer bursts, as does a football bladder when it is blown up too tightly. When the split is complete the sides of the two split portions are joined together and we have two distinct blastospheres, which proceed to form identical individuals.

Since the division is always by twos and it is the opinion of Dean Horatio H. Newman of the University of Chicago, author of "The Physiology of Twinning" and "The Biology of Twins," which are regarded as standard reference works on the subject, that it is thus obvious that triplets can never be identical. Two of the children may be duplicates and the third merely a fraternal type, the result of the fertilization of a second ovum. It is possible, however, for quadruplets to be two sets of identical twins, Doctor Newman holds. In such instances the two blastospheres, that resulted from the original split, in their turn divided.

The famous German case, partly legendary and partly substantiated by records of the time, of the woman who gave birth to eight children at one time, is also recalled. In this instance—so rare that it is mentioned in all reference works on biological anomalies—the four blastospheres again divided to form eight. An extremely vital reproductive cell may survive two divisions and four normal children result.

Some of the most important evidence as to the nature mode of sex determination and much additional light on the age-old dispute over the relative importance of heredity and environment comes from a study of "identical" twins who have been adopted in infancy by different families, according to Dean Newman who has had charge of a study made by the University of Chicago, of orphans adopted into private homes. Among the 800 children studied were 50 sets of twins. Of this number the cases of two were particularly interesting—first that of Eleanor and Georgiana Kelly. Eleanor had been adopted when she was two years old, Georgiana at eighteen months. Both had grown up in environments in many respects entirely different. And yet they are as nearly alike as they could be, not only in appearance but in the matter of mental drives and impulses as well.

In contrast to the Kelly twins, there is the case of Alice and Olive Redman, also identical twins studied and observed by Doctor Newman and his assistants. Alice and Olive, born in London, were separated from each other, through adoption, for more than ten years. Not long ago, they were reunited in Oshawa, near Toronto, Canada.

The Redman girls received about the same amount and kind of education, they are remarkably alike physically, and they apparently have the same interests and tastes. But there is a vast difference in the mental developments of the girls.

## Community Building

### Home Exterior Matter for Careful Thought

The proper finishing of the exterior of the home is a subject of much thought and study on the part of the architect, and a matter which requires the utmost skill on the part of the builder in carrying out the plans. To cover the technique of good exterior construction would require a volume. The following brief generalities are offered as suggestions.

All outside construction should be such as to provide rapid drainage of water and to prevent the accumulation of debris. No enclosed flat spaces on which water remains should be permitted. All horizontal work should be given a slope that will insure good drainage. All joints at the end of horizontal work should be constructed so as to prevent the seepage of water underneath.

All end joints in the gutter should be liberally daubed with white lead. White lead should also be used in the joints in the porch floor.

A good priming coat of paint should be placed on the wood as soon as it is in place. Nails should be countersunk and the depression filled with putty after the priming coat has been applied. Lastly provision should be made for the proper circulation of air around the foundations of porch columns and at the bottom of balusters. This permits water to dry rapidly and aids in preserving the wood.

### Sacrifice Worth While for Children and Home

It costs money to build a home. And sometimes it calls for the making of little sacrifices; the giving up for a time of certain little pleasures that cost money; possibly the delay of a year or two in the ownership of a motor car.

It is an undertaking that requires "backbone," "sand," determination on the part of the men and women who go into it. Then what's the sense of doing it—especially when it is sometimes easier to just keep on renting? Why do worth-while men and women long for a family of youngsters? The price is high—in sacrifices, demands and inconvenience. But the happy fathers and mothers pay willingly, gladly—and are rewarded with happiness.

It is just the way of this good old world—just one of the beautiful and inspiring things of life—that the right sort of women and men have the courage to pay for and to protect the two best things of all—children and a home.—Chicago Evening Post.

### Protection for Porch

A trellis along a porch or a screen to shut off unsightly objects is not only a thing of service but a good example of ornamentation. The beauty of such a structure is in the design of the trellis as well as in the climbers which it supports. A trellis along a porch makes it possible to grow climbers to shut off the brighter sunshine of summer, add to the beauty of the house and exclude unsightly or undesirable views. The bright rays of the sun and the heat which they produce in summer make an unprotected porch very undesirable and uncomfortable for occupation during the greater part of the year unless it is protected by screens or some kinds of vines which have a dense growth and produce broad leaves and heavy foliage.

### Valuable Limestone

Trees and shrubs and flowers are an effective foil to the beautifully soft, light tones of limestone. The delicate shades of gray and buff which distinguish this stone from other exterior masonry materials always blend harmoniously with the vivid colors of nature. They have a way of deepening with the rain and brightening with the sun which gives life and interest to walls constructed of this material. Limestone is always effective when simply used. Being beautiful in and of itself it does not require much ornamentation. When enrichment is desired this stone can be readily carved most elaborately with the assurance that its carving will stay crisp for years.

### Traveler's Impressions

Our roadsides are the most sensitive index of a community. They, and they alone, determine whether you will like a place or dislike it. They are the first and lasting impression.

The roadsides represent what the traveling public sees of our community life. This is true whether they view us from the highways, the railroad or from a boat. It is evident that the general appearance of the community is one of the strongest forces that will impel the purchase of property, expenditures of capital and continued residence, bringing increased values, increased employment and increased business.

### Reason for Happiness

Some little old towns out West feel sad because they don't grow, but in, when a town is so old that it has elms and maples 60 feet high that form tunnels of shade in the summer, why does it want to "grow"? Isn't it happy enough?—St. Louis Globe-Democrat.

## How to Escape FLU

- 1 Avoid so far as possible the places where flu germs are most likely to be spread; overcrowded cars and public meeting places; overheated, stuffy rooms.
- 2 Be careful of close contact with others and beware of all coughers and sneezers; breathe through the nose, get fresh air, but avoid drafts or chilling.
- 3 Get lots of rest. Eat plenty of citrus fruits. Keep the bowels open. Take extra precaution to keep in good physical condition, so your system will have high resistance against germs.
- 4 Above all, avoid catching colds. They lower your resistance to the flu germ. Ward them off. At the first sign of any cold, take Bayer Aspirin and remain indoors if possible until your cold is gone. If you have a sore throat, dissolve some Bayer Aspirin tablets in water and gargle; this will relieve the soreness and reduce the inflammation.
- 5 If you have any reason to suspect even a touch of flu, call your doctor at once.

### Long Lawsuit Ended

The republic of France has just won a long, drawn-out civil suit against two of its lowly communes which disputed the state's ownership of 22,230 acres of worthless dunes situated in the two communes. The local authorities brought forth documents dating to the Fifteenth century, but the government won its case.

### Whole Bird

Diner—Waiter, just look at that piece of chicken; it's nothing but skin and bones.  
Waiter—Yes, sir; if you want the feathers, too?

Youth can elude half its stings by not worrying over whether it is invited to the party or stays at home.

## Sunshine

—All Winter Long

At the Foremost Desert Resort of the West—marvelous climate—warm sunny days—clear starlit nights—dry invigorating air—splendid roads—gorgeous mountain scenes—finest hotels—the ideal winter home.

Write Geo. & Chaffey  
**PALM SPRINGS**  
California

### That Is, Money

"Sandy ought to be successful."  
"Yeah?"  
"Sure, he never believes in giving up."—Cincinnati Enquirer.

Everything comes to him who waits, though sometimes too late.

## Castoria made especially for CHILDREN

CHILDREN usually hate to take medicine but every child loves the taste of Castoria. And mothers like its action—so gentle, yet so prompt and effective.

Castoria is a never-failing comfort to children and mothers alike because it was formulated expressly for children—to correct their little ills and upsets.

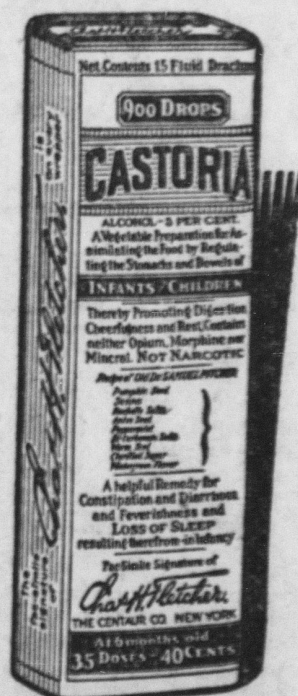
The beauty of it is you can give Castoria to children of all ages with equally sure results. When baby's cry warns of colic, a few drops of Castoria has him soothed; and free from pain, he is asleep again in a jiffy.

In an older child when coated tongue or bad breath tell of constipation, a more liberal dose is

usually all that is needed to cleanse and regulate the bowels.

Your doctor will tell you Castoria deserves a place in the family medicine cabinet until your children are grown. He knows it is safe for the tiniest baby; effective for a child in his teens.

Look for the signature of Chas. H. Fletcher, printed on the wrapper.



**Going Down**  
"But just where is your sinking fund?"  
"Sun."—Louisville Courier Journal.

**Picked the Best**  
Girl's Father—How are your prospects, bright?  
Young Salesman—Yes, sir. Many of them have been through college.

## Act in Time!

Deal Promptly with Kidney Irregularities.

If bothered with bladder irritations, getting up at night and constant backache, don't take chances! Help your kidneys at the first sign of disorder. Use Doan's Pills.

Successful for more than 50 years. Endorsed the world over. Sold by dealers everywhere.

50,000 Users Publicly Endorse Doan's:

MRS. T. C. COOK, 3228 DARWIN DRIVE, LOS ANGELES, CALIF., says: "I had dull, dragging pains in the small of my back and sometimes sharp pains, too. Headaches and dizziness were almost a daily occurrence. The least work tired me so that I could hardly get about. Doan's Pills, however, relieved me of all these symptoms and I felt better in every way after using Doan's."



**Doan's Pills** A Diuretic for the Kidneys