TV AND RADIO



T SAVED a 1953 summer copy of TV Guide with a forecast of what that season held in store for the television viewers.

Quote:

"In show-business annals the year 1953 will probably go down as the year when comedians found that telling jokes on TV was no longer a laughing matter. . . . From the looks of things you can stand by to see more and more comics abandoning their gag files in favor of a snug family-situation comedy. Therein lies TV longevity."

Unquote.

Well here it is 1955 and longevity seems to have come and gone for quite a few of the snug little families who only two short years ago moved into their snug little television apartments complete with twenty-one-inch wall-to-wall carpeting only to discover a clause in the lease which gave the landlords the right to evict them at the end of any thirty-nine weeks.

Among the snug little families who hopefully set up housekeeping back in 1953 dispossess notices have already been, or are about to be, served on Joan Davis and her husband the judge, "My Friend Irma" and her boy friend Al, Ezio Pinza and his raft of kids, Dennis Day and his mother, Mr. and Mrs. Ronald Colman, Ray Milland, "Millie," "Dear Phoebe," "My Little Margie," "Ethel and Albert," "Mr. Peepers," and others.

Abruptly, and often seemingly without reasonable explanation, whole families have been wiped out as if by some horrific pestilence, leaving the viewer in shock at the sudden loss of friends he has clasped to his bosom; friends whose little misunderstandings he could chuckle over because he knew full well that the wife was honestly trying to help her husband put over a deal by dressing in rags to pretend that she was destitute when all the time, and unbeknownst to her, the husband had told the client that he really didn't care if he made the sale or not because he was rolling in wealth-or that the lipstick she found on his shirt collar was not really lipstick at all but red paint of the new color he was, unbeknownst to her, painting the car with which he hoped to surprise heror when a sexy girl friend from out of the husband's past showed up to make the wife jealous she decided to go out and hire an actor to play a

glamorous boy friend from out of her past and when the boy friend showed up at the house he turned out to be the husband of the sexy girl friend who really turned out to be an actress the husband had, unbeknownst to the wife, hired to make the wife jealous in the first place—all these homey little self-identifying problems which had so delightfully plagued the snug little families every week for twentyfive minutes and two commercials only to come out so right and warm at the finish had been suddenly snatched away.

BUT the For Rent sign will not be out for long on these snug little apartments so tragically vacated. Already new tenants have made application for residence. "Those Whiting Girls" subleased for the summer from Dezi and Lucy, and if they manage to live up to the first impression they will find permanent residence somewhere in the neighborhood. "Ethel and Albert" have also found a summer lease after being impulsively vacated and the neighbors hope they will find an apartment somewhere. Phil Silvers has his eye on a place, come September, and with a script by Nat Hiken is practically assured of a ninetynine-year lease. (TV translation three or four thirty-nine-week periods).

And there are others. All move in with great hopes, but it's a high-rent district and restricted to the whim of the landlords who are quick to demand occupancy of any apartment. Take the case of "Mr. Peepers," a most congenial neighbor. I can understand that he might have been forced to move because he lived across the street from Jack Benny, to whose house more people might have flocked. "Mr. Peepers" was getting along fine until one day he got married. I would hate to think that the wispy little schoolteacher was evicted for the reason that instead of being a spectator of the sport of the birds and bees he became an active participant.

One situation comedy lost its lease because of a backstage situation tragedy. That one is "My Favorite Husband," with Joan Caufield and Barry Nelson. It seems that Miss Caulfield's favorite husband suddenly found the whole thing too abhorrent to his finer sensitivities and Miss Caulfield found his attitude too difficult to combat. So one of the best-written, most neatly directed, and finely appointed situation comedies will be no more. Miss Caulfield can obviously not show up next season with a continuation of the show under the title of "My Sec-ond-Best Favorite Husband." This is the first apartment on record out of which the tenants were forced to move because it went uncooperative. -Goodman Ace.



The Thirty-Nine-Week Lease

The Concentrations of Isaac Newton

Continued from page 7

ties quite unlike anything on earth. To suppose otherwise was unthinkable until Newton came along. It may have been, as Voltaire later declared, that the sight of a falling apple caused Newton to ask himself if the force that drew it to the earth might not also be the force that kept the moon circling in her orbit. This seemed to Newton much more likely than the accepted theory of Descartes that the moon and planets were carried around their orbits by "vortexes" in an unseen, unfelt, and unprovable substance called "ether." He went to work on the problem, and although his results were not published until twenty years later, he worked out both the laws of motion and of universal gravitation while at Woolsthorpe, before he was twenty-four years old. He also invented a new mathematical system to prove his theories. This is known today as calculus. During this productive eighteenmonth period Newton plunged into an amazing variety of other studies. He worked out the orbit of a comet, discovered the laws of the tides, delved into the character of light.

BY a series of brilliant experiments, conducted with prisms bought for a few pennies at a country fair, he proved that white light is composed of all the colors in the spectrum, and that each color bends in its own characteristic degree when passed through a prism. He ground lenses and mirrors, and made a new kind of telescope. He did all the mechanical work himself, and concerning this he had a complaint still heard in our own day: "Had I waited for the workmen, I'd have got nothing done."

In his old age, when praised for his great contributions to man's understanding of the Universe, Newton remarked: "I had no special sagacity, only the power of patient thought." He made his discoveries, he said, "by always thinking unto them. I keep the subject constantly before me and wait until the first dawnings open little by little into the full light."

Newton said nothing about any of his Woolsthorpe discoveries at the time, and this reticence was to involve him in angry controversies later on. Early in 1667 he returned to Cambridge and was elected a member of the faculty. Two years later he was made Professor of Mathematics, a position he was to hold for thirty years.

Not long afterward The Royal Society of London for the Promotion of Natural Knowledge saw Newton's new reflecting telescope, and immediately elected him a member. In 1703 he became president of this august assembly, a position he held until his death in 1727.

Newton expressed surprise at the enthusiasm the Royal Society showed for his telescope, which is still today its most prized possession, and offered to send in an account of the discovery in optics which led to its invention. The paper touched off a storm-not because the experiments were not accurate and the conclusions drawn from them indisputable, but because his findings did not square with certain theories then held. So many voices were raised in complaint that Newton finally exclaimed in disgust, "I see a man must either resolve to put out nothing new, or become a slave to defend it." From that time forward he was more reluctant than ever to make his discoveries known.

Although Newton had invented calculus, or "fluxions" as he called it, while an undergraduate, he had not described his method to anyone but Barrow. Some years later the great German mathematician Gottfried Wilhelm von Leibniz, working independently, came up with much the same system. He gave it the name it bears today, the Calculus. It is an invaluable tool of modern engineering and physics.

There was great national as well as personal rivalry between scientists of the seventeenth century, and although Leibniz at first conceded that he and Newton were working on a similar system simultaneously when the issue was drawn his supporters said Newton had borrowed from Leibniz. To prove the point Jean Bernoulli, a famous Swiss mathematician, published two problems, challenging anyone to solve them within a year. Leibniz solved one, and was at work on the other as the year drew to a close.

When Newton heard of the problems he promptly solved both in less than twenty-four hours, and sent the answers to the Royal Society. When the Society published them, without disclosing the author, Bernoulli read through them and said, with a rueful shake of his head, "The lion is known by his claw." The test proved beyond doubt that Newton had indeed invented calculus. He could not have solved the problems otherwise.

PUBLICATION of the "Principia," the greatest of all Newton's work, was largely fortuitous. Edmund Halley, brilliant young Astronomer Royal, was baffled in his attempt to compute the orbit of the comet which now bears his name. He knew of Newton's genius in mathematics, went to him for help, and learned to his astonishment that Newton had already computed the orbit. But search of Newton's cluttered desk did not at once disclose the calculations. Newton quickly did them again.

Halley, meanwhile, had realized the great value of the unpublished research so carelessly stuffed into the pigeon-holes of the great mathematician's desk and offered to publish the work at his own expense. Newton agreed, and the "Principia," which was to be hailed as the greatest scientific book ever printed, came into being. Not until our own day when Albert Einstein came forward with his Theory of Relativity was a single scientific treatise to have an equal

Midsummer Thames

By Paul Roche

MALL shifting knives of hundred-broken sun Dispersed in liquid sheaves, quickly shuffled, swaying, Weaving lateral shelves, elastically playing— Scaly-moving river:

Thames, the amber lizard, Slips with diamond eyes his passage through the fields; White clouds curling round the copper sun. All day the same, in buttercups he lies Listening to the trees and turtledoves.

At noon he lolls along with looestrife-purple tongue By banks where horseflies hum. And mirrors all the golden Iris for his mane, till slowly summer night Unfolds her veil of mist, then breathes wild mint Along his way by moon. 26

impact on the development of human thought.

The "Principia" was written in about eighteen months of the most concentrated work and thought. In it Newton refined and clarified all that he had discovered about the motions of the planets and their satellites, and dealt decisively with a great variety of new subjects. During his study of these problems he would often sit motionless for hours, then dash to his desk and write for hours more, without bothering to pull up a chair. His secretary reported that he seldom went to bed before two o'clock, sometimes not until five or six. He even forgot to eat. The book was published in the summer of 1687, under the auspices of The Royal Society. Newton gave it a sort of sub-title: "The Frame of the System of the World." Even mathematicians found the book difficult to read, not only because the problems dealt with are difficult, but because Newton purposely made it tough so that he wouldn't be bothered by "little smatterers in mathematics." It is in Latin, the universal language of science at that time, and consists to a large extent of mathematical formulae and equations. For two centuries it was the major guide to the world's scientific thought.

The book begins with an explanation of Newton's laws of motion. All previous thinkers had held that some continuous force was required to keep the planets moving in their orbits. Newton said that a body in motion would continue to travel in a straight line forever unless some force was applied to stop it. The planets move in circular paths because the gravitational force of the sun exactly equals the centrifugal force of their motion through space. Since there is no friction in empty space, no additional power is needed to keep them circling at constant speed through countless eons of time.

Newton's second law of motion shows how force is measured by the rate of change of motion. The thirdthat action and reaction are equal and opposite-is the principle of jet propulsion. The book states the law of gravity which every schoolboy still learns today-that every particle in the universe has a gravitational attraction for every other particle in proportion to the product of the masses of the particles, and in inverse proportion to the square of their distances. He showed how to determine the mass of the sun and the planets. He established rules for cal-

LITERARY I.Q. ANSWERS

Column Two should read: 3, 5, 1, 11, 9, 10, 8, 14, 2, 7, 13, 6, 15, 12, 4.



culating the orbits of comets. He proved that the gravitational force of the moon and the sun causes tides in the oceans of the earth; that spring tides occur when moon and sun are pulling together, neap tides when the forces are opposed. "Such a wonderful uniformity in the planetary system," Newton said, "must be allowed the effect of choice" by a Supreme Creator.

The "Principia" was a pioneering work of such astonishing power that it was not long in winning the admiration of scholars everywhere. But the greatest of all Newton's triumphs came more than a century after his death. His Law of Gravitation was considered so thoroughly proven that when astronomers found that the planet Uranus was slightly out of its predicted position they did not suspect a flaw in the theory. Instead they concluded that Uranus must be affected by the gravitational pull of a planet still undiscovered.

Leverrier in France and Adams in England independently computed by Newtonian law the mass and position of this undiscovered planet. Leverrier sent his calculations to the astronomer Galle in Germany. Galle received them on September 23, 1846. He pointed his telescope along the line indicated, and that very night, in the exact spot indicated, he discovered the new planet, which was given the name of Neptune.

EWTON never married, and if there was any romance whatever in his life no trace of it has appeared. The hostess of his comfortable house in London was his niece, Miss Catherine Barton, a beautiful and vivacious young woman whose wit and good looks were toasted by Alexander Pope, Dean Swift, and other noted writers. Through her Newton met many of the famous people of the day.

In appearance Newton was of average height, with handsome, rather sharp features, and a clear ruddy complexion. He was moderate in all his habits. Once when asked why he did not smoke he replied, "Because I do not want to acquire any new

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necessities." He had a talent for making money, and played the stock market so successfully that, despite some reverses late in life, he left an estate of around £32,000, a large sum in those days.

Newton was elected president of the Royal Society in 1703, and two years later, in a special ceremony at Cambridge, he was knighted by Queen Anne, the first scientist ever to be so honored. Between these two events he brought out his famous book on optics, which was largely a development of his early discoveries about the characteristics of light.

In his eighty-fifth year Newton was a venerable figure, renowned wherever learning was held in honor. His last illness was brief, and was brought on by complications caused by a kidney stone. He died in peace, and in the knowledge that the fathomless wonders of the Universe he had so brilliantly explored had been given their shape and their motion by the sure hand of God. Mourned by England and the world. Newton went to his last rest in Westminster Abbey where he lies today, one of the greatest names among that company of the great.

Of his life's work he had written:

I do not know what I may appear to the world, but to myself I seem to have been only like a boy playing on the seashore and diverting myself in finding now and then a smoother pebble or a prettier shell than ordinary, while the great ocean of truth lay all undiscovered before me.

FRASER YOUNG'S LITERARY CRYPT NO. 630

A cryptogram is writing in cipher. Every letter is part of a code that remains constant throughout the puzzle. Answer No. 630 will be found in the next issue.

TN WTBW OCPDTCNA

TBWDTNWT, OCPDTCNA

DBWDTNWT.

S. DBOFNX

Answer to Literary Crypt No. 629 Time goes, you say? Ah no!— Alas, time stays, we go. —Dobson.