

AWAKE!

RIGHT TO HEAR AND TO BE HEARD

Supreme Court decision in case of Jehovah's witnesses
safeguards right to use sound equipment

Palomar's Giant Eye

200-inch telescope to penetrate the unknowns of space

The World's Twisted Tongues

Origin of languages still a puzzle to science

"The Keys of the Kingdom of Heaven"

To whom given? and how used?



AUGUST 22, 1948 SEMIMONTHLY

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News sources that are able to keep you awake to the vital issues of our times must be unfettered by censorship and selfish interests. "Awake!" has no fetters. It recognizes facts, faces facts, is free to publish facts. It is not bound by political ambitions or obligations; it is unhampered by advertisers whose toes must not be trodden on; it is unprejudiced by traditional creeds. This journal keeps itself free that it may speak freely to you. But it does not abuse its freedom. It maintains integrity to truth.

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"Awake!" pledges itself to righteous principles, to exposing hidden foes and subtle dangers, to championing freedom for all, to comforting mourners and strengthening those disheartened by the failures of a delinquent world, reflecting sure hope for the establishment of a righteous New World.

Get acquainted with "Awake!" Keep awake by reading "Awake!"



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AWAKE!

"Now it is high time to awake."—Romans 13:11

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RIGHT TO HEAR AND TO BE HEARD



SUPPOSE a weak voice wished to be heard by an assembled audience of a few hundred. Assume that voice wished to address a vast audience such as President Roosevelt had of democrats at Soldier Field, Chicago, in 1944 during the presidential campaign, or such as J. F. Rutherford had of Jehovah's witnesses in and around the arena at St. Louis in 1941. In both those cases the audience exceeded 100,000 persons. Could a weak or a strong voice effectively reach such audiences without amplification by sound equipment? Could listeners hear, could speakers be heard, if sound devices were outlawed?

Speakers have ever been confronted with the problem of being heard by their audiences. Demosthenes, Greek orator of the fourth century before Christ, sought to overcome the problem by practicing aloud at the seashore till he could be heard above the roar of the waves. But electrical sound equipment has spared modern speakers this arduous course of voice strengthening. Their problem had become one of legality. Many judges, lawyers and officers, as well as the public, have held that the use of amplifying devices can be prohibited or proscribed as a "nuisance". In fact, scores of cities in the United States have laws either prohibiting their use completely or requiring the user to obtain permission from the chief of police. Until recently these restrictions were considered valid

by the majority. Now the judicial climate has changed.

On June 7, 1948, the Supreme Court of the United States legalized the use of sound amplifiers to allow audiences in public places to hear and to allow public speakers to be heard. The case involved one of Jehovah's witnesses and is known as *Saia v. New York*. The 5-to-4 decision of the Supreme Court is one of the great landmarks in constitutional law. It extends the First Amendment to reach and shield the use of sound equipment under the freedom-of-speech guarantee. Just as the Constitution protects the printing press in making possible the wide distribution of literature, so it protects amplifiers that make speech to large audiences effective.

The facts of the case are as follows. During the summer of 1946 Jehovah's witnesses arranged for a series of four meetings in the public park of Lockport, New York. A permit to use sound equipment was granted by the chief of police, and for four consecutive Sunday afternoons a minister delivered Bible lectures. Later in that same summer a second series of four meetings was planned, but officials refused to grant the permit to use sound equipment, stating that objections had been made concerning meetings in the park by Jehovah's witnesses. Notwithstanding, in September of 1946 the first talk of the series began. Police appeared and ordered the sound equipment silenced. One of the officers fumed

that he "didn't have a d—— bit of use for what has been written about the Constitution protecting the rights of Jehovah's witnesses, nor the decisions of the Supreme Court". He forcibly shut off the amplifier and placed the operator under arrest. This was repeated on each of the Sundays the meetings were held, and on each of the four arrests Samuel Saia was charged with violating the city ordinance requiring permission from the chief of police before using sound equipment.

All of the complaining witnesses testified that the meetings were orderly, that they were on religious matters, and that they had not considered the material offensive. They admitted the sound amplification was not nearly as loud as church bells ringing on Sunday, and none of them complained that the use of the sound equipment annoyed them or interfered with their enjoyment of the park facilities. Yet the police court found the operator of the sound device guilty and imposed fines and jail sentences. The convictions were upheld by the county court and the highest court of the state of New York. Appeal was made to the Supreme Court late in 1947.

Argument by Counsel

Counsel for Jehovah's witnesses argued before the Supreme Court that sound devices were necessary to speaking in public places in these modern times. It was shown that it had become common practice, in the exercise of free speech, to use mechanical means to amplify the voice. During the war the army and navy and civil service and other organizations employed loudspeakers to reach the people and make known their needs for recruits and for other purposes. Campaigners in state and national political contests would be silenced if denied the use of sound equipment. By such equipment labor unions air their side of controversies, religious organizations preach their messages, national

conventions reach the ears of thousands of delegates. Athletic events are rarely without this speaking aid. Wherever a group of persons assemble for meetings there is likely to be in operation an amplifying system. Speech is crippled without it.

Parks and streets are natural and proper places for communication of ideas. From time immemorial public parks have been used as places of assembly, for making public speeches on commercial, political and religious subjects. Since the days of the Lord Jesus Christ and His apostles, Christian ministers have made use of concourses, market-places, *hustings* and public parks; in fact, any place where a crowd could be gathered and addressed.

Hand in hand with the right to speak goes the right to be heard. And the right to be heard carries with it the right of speakers to use devices that will further the range of their voice so as to reach hearers in public places. Since parks are rightfully used for communication of opinion and information, the speaker has the right to speak so as to be heard in such parks. Any ordinance that prevents his being heard, by forbidding the use of sound equipment, effectually shuts his mouth and abridges his right of free speech and assembly.

Counsel for Jehovah's witnesses further informed the court that the only permissible limitation upon the use of the sound device by a public speaker was the reasonable regulation as to time, place and manner of exercising free speech. Ordinances prohibiting or censoring sound amplification cut off entirely the right of listeners to hear and speakers to be heard in public places. Though they may be called "regulations", such ordinances are not permissible regulation but are a blanket ban on outdoor speaking with a sound device, and hence abridge the freedoms of speech and assembly. And to make the freedom to speak with sound equipment so as to be

heard subject to police permission is contrary to rulings of the Supreme Court pursuant to the Constitution.

The Majority Decision for Freedom

After due consideration the Supreme Court rendered its decision. Mr. Justice Douglas, joined by Justices Murphy, Rutledge and Black and Chief Justice Vinson, in a concise and pointed opinion preserved the constitutional freedom to hear and to be heard. Said the court:

We hold that § 3 of this ordinance is unconstitutional on its face, for it establishes a previous restraint on the right of free speech in violation of the First Amendment which is protected by the Fourteenth Amendment against State action. To use a loudspeaker or amplifier one has to get a permit from the chief of police. There are no standards prescribed for the exercise of his discretion. The statute is not narrowly drawn to regulate the hours or places of use of loudspeakers, or the volume of sound (the decibels) to which they must be adjusted. The ordinance therefore has all the vices of the ones which we struck down in *Cantwell v. Connecticut*, 310 U.S. 296; *Lovell v. Griffin*, 303 U.S. 444; and *Hague v. C. I. O.*, 307 U.S. 496. . . .

The present ordinance has the same defects. The right to be heard is placed in the uncontrolled discretion of the chief of police. He stands athwart the channels of communication as an obstruction which can be removed only after criminal trial and conviction and lengthy appeal. A more effective previous restraint is difficult to imagine. Unless we are to retreat from the firm positions we have taken in the past, we must give freedom of speech in this case the same preferred treatment that we gave freedom of religion in the *Cantwell* case, freedom of press in the *Griffin* case, and freedom of speech and assembly in the *Hague* case.

Dispelling the specter of anarchy conjured up by the opponents of free speech and freedom to hear through regulated use of sound amplifiers, the opinion further declared:

The present ordinance would be a dangerous weapon if it were allowed to get a hold on our public life. Noise can be regulated by regulating decibels. The hours and place of public discussion can be controlled. But to allow the police to bar the use of loudspeakers because their use can be abused is like barring radio receivers because they too make a noise. The police need not be given the power to deny a man the use of his radio in order to protect a neighbor against sleepless nights. The same is true here.

And abuses which loudspeakers create can be controlled by narrowly drawn statutes. When a city allows an official to ban them in his uncontrolled discretion, it sanctions a device for suppression of free communication of ideas. In this case a permit is denied because some persons were said to have found the sound annoying. In the next one a permit may be denied because some people find the ideas annoying. Annoyance at ideas can be cloaked in annoyance at sound. The power of censorship inherent in this type of ordinance reveals its vice.

Courts must balance the various community interests in passing on the constitutionality of local regulations of the character involved here. But in that process they should be mindful to keep the freedoms of the First Amendment in a preferred position. See *Marsh v. Alabama*, 326 U.S. 501, 509.

The Minority Dissent

Four justices dissented, taking the extreme viewpoint that the peace and quiet of the park outweighed the right of free speech. They failed to recognize the middle ground established by the majority, between "uncontrolled discretion" of police and "irresponsibility to set up sound equipment in all sorts of public places". This fair middle ground can be established through the use of narrowly drawn and specific statutes regulating sound equipment. The dissenters asserted judicial remedies were available when police authority was abused, but disregarded the fact that such remedy at best is only after trial, conviction and lengthy

appeal, as in the present case. Forgotten, also, by them were former pronouncements by the court that "wherever the title of streets and parks may rest, they have immemorially been held in trust for the use of the public and, time out of mind, have been used for purposes of assembling, communicating thoughts between citizens, and discussing public questions". (*Hague v. C. I. O.*)

The "freedom to be let alone" contended for by the minority is an innovation in the field of constitutional law. They stretch this specious, alien doctrine too far. If the streets, concourses, public squares and parks were reserved exclusively for the rest and solitude of the public—including the lazy, loafers, bums, vagrants, panhandlers—then their cherished use as places of public assembly will have been destroyed. The new, vaunted phrase of the minority is a mere euphemism. "Freedom of privacy" in a public place is too far-fetched to be taken seriously.

In a separate dissent Justice Jackson derides the majority with the bold assertion that "this decision, which seems to me neither judicious nor sound and to endanger the great right of free speech by making it ridiculous and obnoxious, more than the ordinance in question menaces free speech by regulating use of loudspeakers". The true target of his vituperative darts is Jehovah's witnesses, toward whose Christian message and work he has shown no love and little tolerance. By artful insinuation he subtly paints Jehovah's witnesses as invaders of others' rights and property, as annoyers, fanatic propagators of obnoxious doctrines, and indiscriminate, irresponsible abusers of the use of sound systems. He presumes to exaggerate the facts, stating they "set up a sound truck so as to flood this area with amplified lectures". He writes loosely of "erection" of elaborate apparatus on public property, despite the record that the loud-

speakers were mounted on a car parked at the curb of a public street.

Justice Jackson, through free use of such terms as "regulate" and "control" in describing the ordinance, seeks to soften the impact of the prohibition in the ordinance. He shuts his eyes to the censorship delegated to the police chief. And again he departs from the facts when he says: "There is not the slightest evidence of discrimination or prejudice against the appellant because of his religion or his ideas." But the record shows that the Lutherans were using sound equipment in a near-by stadium, about 1,000 feet from the place where Samuel Saia was using sound equipment. When the police shut off Saia's equipment, the Lutheran amplifiers were clearly audible. On this point Jackson ventured into the field of *acoustical engineering*, intimating that because of a six-foot-high fence the Lutheran sound equipment would not be heard. A remarkable contention!

Pursuing his hair-splitting argument, he grasped at the recent decision forbidding religious courses in public schools. From it he argued that free speech in public parks should be denied because the parks are public property. On this theory preaching could be forbidden on the streets or sidewalks or by house-to-house calls, since the streets and sidewalks are public property. His final suggestion that use of sound equipment may be prohibited because it "may lead to riots and disorder" is so flimsy, so untenable, so reactionary and so contrary to a long line of Supreme Court decisions that it need not even be refuted.

Nation-wide Comment

Some of Justice Jackson's absurdities were reflected in the widespread editorial comment on the decision. The careless handling of fact by Jackson became flagrant falsehood in the columns of some newspapers. A Florida paper, the *Miami Herald*, maliciously wrote, on

June 19, in an editorial entitled "Asinine Decision": "At Lockport, N. Y., the Jehovah witnesses made night hideous with their sound-truck shoutings which prevented people from sleeping." Remember, the lectures were on Sunday afternoon. No Pulitzer prize editorial, this. It will take its place alongside two other infamous editorials appearing in the *Herald*, on November 2 and 7, 1944. In reversing the convictions of the associate editor and the Miami Herald Publishing Company for contempt of court, the Supreme Court found the 'editorials and a cartoon based on inaccurate, distorted, incomplete, and biased reports'. (*Pennekamp v. Florida*)

A sane editorial on the decision appeared in the Lockport *Union-Sun and Journal*, June 8. Jehovah's witnesses concur with it. It said:

On the face of it, and in fairness under our democratic system, it appears that the religious sect which forced the case to the Supreme Court after adverse rulings all along the line is as much entitled to use sound equipment as any other agency—whether it be an athletic enterprise or some medium of advertising. On the other hand, the public peace should not be flouted by indiscriminate cacophonies of noise. Alteration of the Lockport ordinance relating to this problem in or-

der to bring it into harmony with the Supreme Court decision is a matter for legal minds. In the meantime, however, it is not amiss to remind advertisers, religious sects, sports broadcasters and home radio fans that "moderation in all things", especially when adjusting the volume control, is still a very good philosophy.

In this day of jet-propulsion, atomic energy, radar and electronic developments, a loud-speaking apparatus long ago became a necessity for effective public speaking. Sound equipment has a necessary relationship to freedom of speech and assembly. Every speaker has the right to be heard. Every listener has the right to hear, whether he be on the front row or the back row. The modern practice of reaching all the ears of large audiences by sound devices should be preserved. By a narrow margin, a 5-to-4 decision, it was preserved by the Supreme Court. Chief Justice Vinson cast the deciding vote, and thereby joined the four liberals, Justices Douglas, Black, Rutledge and Murphy. He is to be commended for swinging over to the side bulwarking personal liberties, and sharing in another landmark precedent by this liberal court. The decision stands as a beacon to the right to hear and the right to be heard.

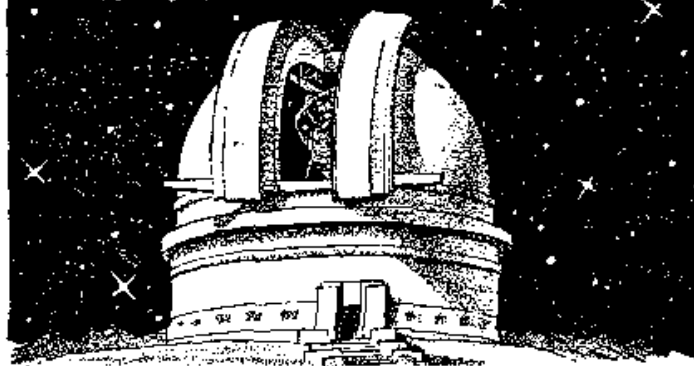


Planes Make Possible Cross-Country Television

¶ Television radio waves travel in straight lines, unlike standard radio broadcast waves. Hence television does not carry beyond the horizon, near to the ground, due to the curvature of the earth. This limits telecasting to 35-50 miles, without costly relay stations or coaxial cable lines, not now available in most areas.

But, during an evening of the recent Republican convention in Philadelphia, the television broadcast of the convention was brought to Zanesville, Ohio, a video-less community. It was effected by aviation. A plane wheeled in lazy circles high above Pittsburgh, and at its 25,000-foot altitude could pick up the television program from Philadelphia, and rebroadcast it on to Zanesville. The plane simply became, in effect, an ultra-tall television antenna. Eight planes could effect a coast-to-coast television network between Hollywood and New York. Such air-borne television networks are called "stratovision broadcasts".

PALOMAR'S GIANT EYE



To penetrate four times as much space
as ever before

largely the work of the late Dr. George Ellery Hale, whose work has been honored by the naming of Palomar's "giant eye" the "Hale telescope".

Information about the heavenly creations of Jehovah may well be vastly increased by this latest triumph of science and engineering. Its use will show further the insignificance of the entire solar system, that it is but a grain of sand in a Sahara of space and astral matter.

People who have accustomed themselves to enormous figures by contemplation of the national debt are apt to shrug at the mention of the glass' 16 $\frac{3}{4}$ feet diameter, and ask why they did not make it fifty or a thousand feet in diameter. The facts are that the twenty-ton glass disc, as it was originally poured by Corning Glass Works of the famous Pyrex type, almost proved too much for the ingenuity of the world's greatest scientists. To ship, polish, transport and erect the giant reflector on the granite up-thrust known as Palomar mountain (elevation 5,565 feet) bred prodigious difficulties that would be tripled by adding even another 100 inches to any future mirror.

In the manufacture fused quartz was first used in an effort to produce a disk with almost no contraction and expansion. The bubbles in this could not be removed. Then other glass was employed and smaller models experimentally poured. The glass must be rigid, because its only purpose was to furnish a suitable surface for the millionth-of-an-inch layer of aluminum paint that would be applied to form the world's largest mirror. To reduce the weight of what would otherwise have been a solid disk two feet thick, the glass mold was designed to

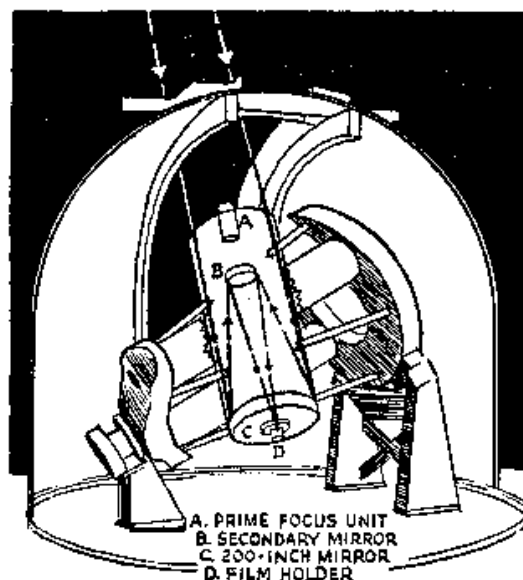
EVER since a Polish monk named Copernicus, in the early sixteenth century, incurred the pope's hatred by declaring that the earth is a part of a system of which the sun is center; and since Galileo looked at the heavens with a homemade telescope of concave and convex lenses spaced apart, advanced the theory of planetary rotation, and for fear of the Papal Inquisition was forced to recant from this great truth; ever since those times the Roman Catholic Church has waged a losing fight in its effort to stop the investigation of the visible universe. As one writer expressed it: "Like Canute, the Church rumbled in vain. For men will find out and believe new things even if it kills them."

Such is the momentous scope of the new 200-inch telescope mounted at the Astrophysical Observatory of the California Institute of Technology on Palomar mountain in southern California that all other penetration of the heavenly universe pales in comparison. It is to penetrate four times as much space as ever before. Yerkes Observatory, at Williams Bay, Wisconsin, has its 40-inch refractor type telescope, the largest of that kind in the world. Mount Wilson, California, has its 100-inch mirror or reflecting type telescope, which until the June 3 erection of Palomar's 200-incher, was the largest in the world. (See article on page 26 regarding dedication.) All three of these space-piercing telescopes were

form ribs or cells similar to those of a waffle. A forty-inch hole was left in the center of the "eye" for secondary reflection. The final result, after grinding and polishing away more than five tons of material, was a curved solid surface only $4\frac{1}{2}$ inches thick, stiffened by the supporting ribs. Still the glass retained some flexibility, and had to be supported by a steel pan with fulcrums and counter weights to prevent stretching and distortion in the various positions required for observing the heavens. The first disc cast on March 25, 1934, in Corning, New York, proved defective and had to be discarded.

In 1936, after a successful pouring with Pyrex glass and a controlled cooling process, which permitted a temperature reduction of only one degree each day, the great plate was carefully packed for shipping on a special car. Although nearly engulfed by a flood in the East, it finally arrived in Pasadena, in April of 1936. The final polishing into exactly the desired curve, accurate to within two-millionths of an inch, has consumed almost all the time since.

The importance of precision in the finish is underscored by the necessity of attaining perfect reflectance. In the polishing process, only flour-like iron oxide was used. Even the clothes of the employees were specially designed, no air circulation was permitted during the day, temperatures were carefully regulated, dust and metal filings were removed by vacuum and magnet. The great polisher, supported by an overhead crane, operated so carefully that only one-quarter ounce of glass was removed each week! The final precision test was made through a device employing a light wave,



accurate to two-millionths of an inch!

At 3:30 a.m. on November 18, 1947, a twenty-two-wheel truck left the Cal-Tech campus in Pasadena with its carefully packed cargo of $14\frac{1}{2}$ tons of glass. One hundred and fifty miles away, on Palomar mountain—selected because of its clear air, earthquake-resisting base of twenty-mile-deep granite, and flattened top permitting emplacement some five miles back of its rim to avoid glare from San Diego, fifty miles distant—stood the 137-foot dome, complete with yoke, tube, and intricate operating equipment. The dome is hemispherical, and appears silvery from the outside. It rises 110 feet from the observation floor and has a diameter the same as its height, 137 feet. The whole dome revolves by rubber-tired friction motor on a track swinging the thirty-by-eighty-five-foot aperture in any direction. Thus given access to the heavens, the telescope can survey any portion of the sky from the North Pole to the southern horizon. The aperture is in turn opened and closed by electrically-driven shutters, each weighing 100,000 pounds.

Before the caravan left for south-central California the dome was all ready for the "giant eye". In transit the greatest precautions were taken. The caravan moved at low speed, often no more than four miles per hour. Fifteen motorcycle patrolmen accompanied the truck. Bridges were specially supported with shoring. Inside the case was a microphone to warn of any vibrations that might shake the big glass too much. After a tedious trip up the cedar-and-oak-fringed road of Palomar, the disk arrived and installation began.

The great giant is designed to automatically find a star, given the po-

sition from a previous photograph. Thereafter everything is the work of an infallible robot. "A motor rated at one-twelfth horsepower tracks the star. There are no jumps. Errors accumulate slowly and uniformly, and, when they amount to a tiny yet an intolerable fraction of a second, the machinery corrects them automatically. A perfect timing device slows up and accelerates the tracking motor just enough." A four-foot air space between the inner and outer shells of the dome gives heat insulation, making possible the control of the glass' expansion and contraction due to variations in temperature. Other intricate mechanisms turn so as to offset the rotation of the earth. Resting on a thin film of oil under pressure of more than 500 pounds per square inch, the supporting base moves in a manner more frictionless than anything else known to man except the earth, which Jehovah 'hangeth upon nothing'.

Operating the Giant Eye

Now follow the operations of a typical observation. The observer (who is really a director of the telescopic sky exploration, and cannot see the dim outline of the stars which slowly take shape on the negative receiving the mirror's reflected light) first takes an elevator to his station within the tube itself. This tube, which contains the mirror, and is called the declination movement, is really an open framework of giant struts and girders, large enough in diameter to contain the great eye near its lower end, and long enough to accommodate the prime focus 55 feet upward from the mirror. (See diagram.) The muzzle itself, which constitutes the end of the tube pointing toward the heavens approximately 70 feet above the observation floor, can be swiveled in a complete circle and raised and lowered. By these two adjustments any portion of the skies can be brought under observation.

The observer sits in the tube of the telescope itself. In fact, he is cutting off

some of the light from the heavens that is entering the muzzle above and striking the mirror 55 feet below him. But some light must be sacrificed in this type of reflection, and the portion cut off about equals in position and amount the loss caused by the 40-inch hole in the center of the mirror. The observer has a log showing the location of each previously explored star, galaxy, etc. He decides on the sector to be scrutinized, sets the instrument according to the sky map, utilizing a not-too-distant star as a guide. Remember that the observer cannot see anything in the big mirror below, but his guide star appears at the conjunction of cross hairs on *the receiving negative* he has inserted in the holder on his desk. Thereafter he must keep the guide star centered on the negative.

This operation makes clear that *the giant mirror is not designed for enormous magnification, but for the extensive collection of light. The use of the Hale telescope is purely photographic.* Thus while the monster tracks the heavens around the "guide star", the director marks any deviation in the guide star's position, and speaks instructions to his assistant at the control board below. No telephone receiver is required. His words are transmitted by microphone, and the answer comes by loudspeaker. While an eyepiece assists the observer to check the telescope's movements as indicated by the guide star, the picture being made by time exposure cannot be seen, because in observing distant stars their light is often so feeble that only after hours of exposure does it appear at all. Then it shows up after the negative is developed. Photography has thus become the master art of modern astronomy.

In addition to accommodations for the scientists (and only astronomers will be granted use of the magnificent equipment) Palomar also has a 48-inch Schmidt-type telescope, and a smaller,

18-incher. These are useful for scouting the skies, locating "game" worthy of the big mirror. These instruments cover a larger area of sky, while the Cyclopean giant concentrates its vision on one-fourth second of arc at a time, or approximately $1/25000$ of the entire sky area. This means that the big 'scope would have to take 27,000 photographs to map the whole sky; and, since many of these would require long hours, perhaps eighty or more, and the astral bodies would change position greatly in the years, it seemed more advisable to make selections for observation, which is done through the smaller telescopes.

What Is the 200-Incher Designed to Do?

The experience, skill and wisdom of the scientists of the world have gone into the production and erection of the Palomar telescope. Nearly all branches of physics and engineering contributed to the final result. After Hale found that forty inches was about the greatest size for efficient use of the refractor type telescope, he designed the 100-inch mirror type, and had its erection at Mount Wilson financed. Meanwhile the astronomer had largely diverted his interest from such comparatively close objects such as the sun, moon, and planets. Studies and observations turned to previously uncharted reaches of space. His vision was projected into distances so staggering that their computation called for a vaster unit of distance. To meet this need the *light year* was the unit adopted. When it is remembered that a light year is the distance that light, flashing at the rate of 186,000 miles per second, can travel in a year, which has been computed at nearly six trillion miles, then the term 500,000,000 light years, the outer fringe of penetration by the 100-incher, becomes fabulous indeed.

Light from the moon reaches us in about a second and a half. From the sun it requires eight minutes, and from Pluto, the farthest known planet in our

solar system, it requires about six hours to traverse the three billion miles. But inspection of our solar system was not what the new telescope was designed for. Although because of its greater light gathering it will be used to take snap shots of Mars (previously only time exposures could be taken, as there was not light enough for flashes) the great purpose of the new telescope will be to study distant galaxies, spiral nebulae, island universes similar to our Milky Way, of which the solar system is but a dot on the outer fringe.

Efforts to determine the composition or mean density of the universe, whether the "jeweled galaxies" that float in outer space are in reality traveling away at speeds approaching one-seventh that of light, whether sidereal (starry) space will reveal itself as finite or infinite—these are questions which scientists hope to answer through the latest invention of human ingenuity. No doubt the instrument will prove as ineffectual or powerless to answer the enigmas of the universe as dissection of the human anatomy has proved futile in solving the mysteries of life. As one writer wisely predicted, the telescope will answer many questions but as it pierces into ever vaster reaches of the universe it will raise more questions than it solves.

As the quest for wisdom inspires the ionospheric rocket, and the glass with a million-eye power, the result has not been to raise intelligent men's estimation of themselves, but rather the contrary. The Papacy has had to swallow some bitter pills since they burned Giordano Bruno at the stake in Rome for expounding Copernicus' theory that the sun, not the earth, was the center of our system. Our solar system is not even the center of our Galaxy, the Milky Way. It is really near the sparsely-filled outer rim of this great system extending about 78,000 light years across. Some think that our Galaxy would have a spiral shape if viewed from the outside, and

that the nucleus, or central point, is hidden by interstellar dust somewhere in the region of Sagittarius.

Our Milky Way, that faintly luminous tract or belt seen at night stretching across the heavens, contains as many as 200 billion other suns, besides our own. Whether these in turn have each their planetary systems is not known. The nearest galactic island is Andromeda, a great flat rotating disk of 100 to 200 billion stars, 65,000 light years across. Each of the galaxies, often including novae or exploding stars, revolves around a dense nucleus of stars, sometimes taking 200 million years for a single rotation. "Despite the sparseness of about one galaxy per three billion billion cubic light years, yet 150 million galaxies have come within the range of the 100-inch telescope already." Astronomical experts, who do not know that Jehovah is the God of order, are greatly amazed that, despite the incalculable number of stars, nebulae, and island universes within the infinite universe, there has never been a single recorded instance of collision between stars.

It is estimated that a man with best visibility can see a candle burning at a distance of sixteen miles. Only about 5,000 stars are visible to the unaided eye. Dr. Walter S. Adams, former director of Mount Wilson, estimates that with the 200-incher a picture could be made of a candle distant 41,000 miles. The great mirror has the power of a million eyes. It is expected to penetrate a part of the cosmos hitherto unplumbed and bring in the light of stars a *billion light years distant!* Not only will it seek out new heavenly wonders, but it is hoped it will discover why the more distant spiral nebulae appear to rush away from us. Is the universe curved, they wonder, and having a terminus, as believed by Einstein? And do not forget, the giant will be raising some questions of its own also.

In the museum at Palomar a picture of the nearest spiral nebula, about 700,000

light years distant, arrests the eye. The brilliance of the spiral nebulae is reduced by the limitation of man's vision to color wave-lengths from red to violet. Infrared is reflected as black. Yet the sight of the first spiral nebula as it came to an investigator's eye must have dazzled even the experienced. Even if not sentimental he doubtless gazed enraptured. In the photograph it looks like a fiery pinwheel caught with its flashing streamers curling out from the blazing vortex.

While picking up stars of the 21st magnitude, of which 63,000,000 would be required to make the light of one star of first magnitude such as Sirius, the glass will investigate a peculiar phenomenon noticed in connection with the spiral nebula. A great many of these clusters are bunched on the outer edge of visibility's limit for the 100-incher. Their spectrum or breakdown into component colors indicates a shift to the lower red wave-length. In closer constellations this has indicated rapid movement away from our Galaxy. The question which will be probed now is whether this does indicate a motion that is similar to an "explosive increase" outwardly of our universe.

Great things are expected of the giant mirror. But before enthusiasm for this latest effort to search out the wisdom of the heavens, domain of the Infinite God, runs too high let it be remembered that the photographs of distant star clusters are very small affairs, and hypothesis is apt to out-distance fact in the conclusions arrived at. Nevertheless, Palomar is certain to bring forth some amazing facts about God's universe. To the God-fearing, the revelations will multiply proof of King David's meditations: "When I consider thy heavens, the work of thy fingers, the moon and the stars, which thou hast ordained; what is man, that thou art mindful of him? and the son of man, that thou visitest him?" —Psalm 8: 3, 4.

Colors SWAY YOUR EMOTIONS

THERE is more to color than meets the eye. There is more to color than the physical stimulation of the retina's color cones. Color penetrates the mind, reaches the innermost feelings, and either tickles one's fancy, thrills one's emotions or calms and quiets upset nerves.

Think of the feeling of warmth that passes over us when staring at the red flames of a bonfire or a molten kettle of foundry metal. Call to mind the heartening "lift" that the bright green of early springtime gives after a long, cold winter. Think of summertime's golden ears of corn and the yellow glow of ripening wheat fields. Think of the joy and gaiety that creep over us when walking through autumn woods that are splashed with nature's colors. Or call to mind how heavy and depressing a gray-skied cloudy day weighs upon you. A dashing girl on skis becomes more dashing in a ski suit of flaming red. A moonlight scene is more relaxing and romantic if painted with deep blues and violets. Yes, color is more than an outward sensation.

It does something to us inwardly. It either quiets down or stirs up our emotions. Why, we are told that even the ill-colored walls of a home may be the source of domestic quarrels.

The red of the blood, the blue of the sky, the green of the woods, the multi-

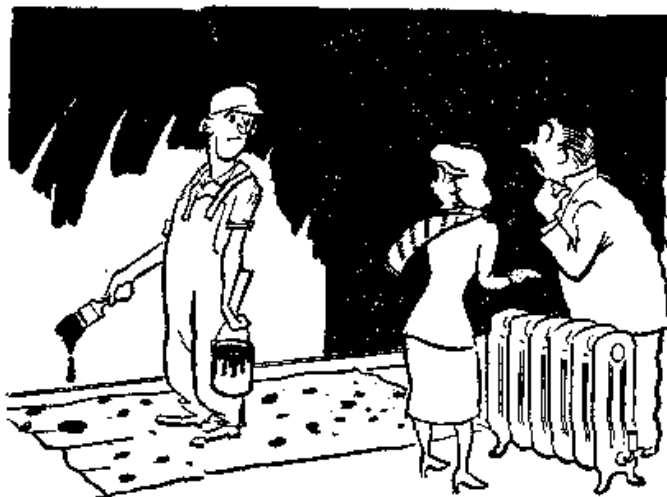
colors of the flowers and birds, all evoke in our minds certain distinct emotional reactions, each different from the others. Some of these reactions touched off are so strong that colors like red or orange actually make the body warmer than a color like blue. This was forcefully demonstrated when the girls in an office complained that they were cold even though the temperature of the room was 72°F. When engineers were called in they recommended the repainting of the blue-green walls with a warm coral-colored paint. This done, all complaints ceased.

Color Molds Different Moods

There are many other instances where colors have been found to play heavily on the mental attitude of creatures. In a Pittsburgh steel plant during the war absenteeism of one department was cut from 20 percent to 6 percent when the walls were painted a warm beige to neutralize the sickly bluish light of the fluorescent lights.

Though one may not be aware of it, color greatly affects the appetite. Green salad plates instead of white ones increase the customer's appetite in a res-

taurant. No chef of any reputation overlooks the matter of color when planning and arranging his menu. Eye appeal, or, better stated, mental and emotional appeal, is much greater when serving red meat like beef if yellow carrots and green peas are served with



green sprigs of parsley on the white potatoes. Even children will go for their milk if it is brightened up and made flashy with harmless food dyes.

The aircraft industry learned that airsickness is reduced if the interior of the planes is decorated with pastel shades of green and blue instead of yellow and brown. Not only has eyestrain, "after-image" and nervous fatigue been reduced, but also the mental attitude and disposition of the workers has been improved, with higher production as a result, in factories and industrial plants that have chosen proper colors for work benches and walls. Certain colors of clothing will make one look older or younger than other colors. And when it comes to a masquerade party or similar social gathering an exciting and mystifying effect may be created by replacing the ordinary lights with several strong bulbs with magenta-colored filters over them placed on the floor behind the furniture.

An improper or misused color also emphasizes what a powerful influence color plays upon human emotions. The wicked Nazis used color as a weapon to torture their helpless captives. By placing their victims in large brightly lit rooms that were painted with the most fantastic and horrid colors they were able to drive some of them mad by the clashing colors.

If some colors and color combinations can stimulate and excite people to the point of mental breakdown, it is reasonable to suppose that other colors and color arrangements would have the opposite effect, a soothing and calming effect. And such is the case. In fact, medical science has not overlooked this, especially when treating nervous and mental disorders. Hospital patients suffering from mental depression are stimulated and given a "lift" in rooms with walls decorated in pinks, yellows and oranges. On the other hand, those that need quieting and calming down are put

in rooms painted with subduing blues and soothing greens. When the doctor advises the over-excited and nervous individual to "take to the woods" for a vacation he is using good color psychology, for out there one is surrounded with a quiet curtain of forest green and a cool blue sky overhead.

Individual Color Personalities

Red is by far the most powerful color there is, the one that increases the respiration and blood pressure of man more than any other. It suggests action and excitement. Hence red is chosen as the color for labels reading "Explosives", "Fragile," "Poison," "Danger" and "Exit". A football coach painted one room red, where he gave his fight talks, but another room used for rest and relaxation he had painted blue.

Blue is passive, cold and deep in its mood. It is characteristic of tranquillity, calmness and expansiveness. It symbolizes truth, justice, consistency and sincerity. Certain yellows suggest to the mind glory, prosperity and cheerfulness, whereas other yellows suggest sickness, cowardice and cheapness. One shade of purple might suggest majesty and royalty, but another purple impresses one with the feeling of passion, suffering and mystery.

Psychologically black also has a great influence on the mind. As a sedative and sleep-inducer black bedclothes, bed sheets and pillowcases in a room with black walls has been suggested by one doctor as a treatment for insomnia. "Those that have made a specialty of occult studies," says the *San Francisco Chronicle*, "point to the fact that black is the color of Saturn, the planet of gloom, misfortune, fatality and other evil things." Such symbolism is continued to this day by the black-garbed clergy and hooded nuns of Christendom. The success of the black gowns worn by fashionable ladies is not due to their clergy-like darkness, but to the texture

of the material and the mystifying lines and contour that are set off in contrast and in relief. Lady spies are popularly conceived as garbed in mysterious and aristocratic black.

All of this research and study has led colorists to some very definite conclusions regarding the effect of various hues on the human emotions and disposition. Psychologically some colors are warm, while others are cool. Some are light in weight; others are heavy. Some are advancing and others are retiring. White is the lightest in weight and black the heaviest, with all other colors falling somewhere between the two extremes. A workman who has pushed a black handtruck all day feels more tired than when the same truck is painted green. Red, a warm color, is also an advancing hue, while blue, a cool color, is passive and receding. Even the lens of the eye becomes nearsighted to cool rays and farsighted when looking at warm colors. Taking advantage of these facts, subtle effects and optical illusions are created solely by colors to give perspective and the third dimension.

Color Harmony and Emotions

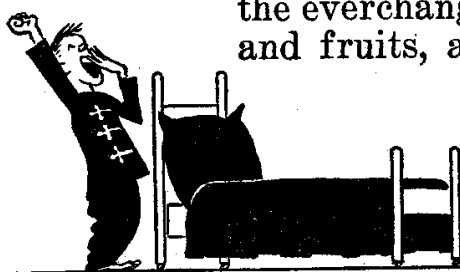
Understanding how color affects the human mind and its emotions, the artist and designer uses colors to give beauty, joy and contentment. Color harmony in a butchershop was achieved when the bright yellow walls were repainted green, the complementary color of the red meat. A marked increase in customers resulted. Using color's psychological or purely suggestive power on the mind, white, blue and blue-green are used for advertising refrigerators, and red, orange and red-brown for advertising heating units.

Probably no other field of endeavor makes a more extensive study of color psychology than the commercial packaging industry. Sales promotion agencies

demand that soft feminine colors never be used for men's personal articles, and vice versa. Toothbrushes, combs, boudoir chairs, bedspreads and dresser sets for the ladies must be colored in dainty pastels. Articles for children—toys, games, scooters, balloons, and such—must be painted with strong, gaudy colors. The South American's colorful garments do not appeal to the conservative European. Chinese color taste differs from that of the African. All of this is because emotions differ with age, sex and race. Again, there is a wide variety in personal likes and dislikes between those of the same race, sex and age. One thirsts after one color, others after another, because of difference in mental temperament and color sensitivity. Time, weather and circumstances also affect the mood and emotion of the same individual, so that different color schemes must be provided for an individual's bedroom, living room and kitchen. Offices, libraries, restaurants, hospitals, theaters and homes all vary in color design to fit the human emotions at various times—sometimes volatile, sometimes static.

Color and its power over man's emotions is founded on fixed laws, divine laws. If used successfully colors must be combined intelligently in accordance with these laws. Like musical notes, they must be arranged in patterns to give melodious compositions that are pleasing to man's sensitive emotional perception. Study the color designs in nature if you want to learn the true power and harmony of color. The enduring and permanent part of creation is made up of greens, browns, tans and grays. The brilliant flashes of color are reserved for the everchanging sunsets, seasonal birds and fruits, and the temporary flowers.

Jehovah God in His infinite wisdom made no errors in clothing the countless objects of this planet in color.



TWISTED TONGUES

Whence All the Languages?

ONE of the biggest of the big barriers that make world unity an unattainable goal by this confused old world is that of languages. Ranking along with religion and politics as a source of general confusion the present-day Babel of tongues reaches an incredible figure: that of 2,796 tongues; some spoken by millions, others by only a few hundred. When, even among those of the same language, misunderstood statements have been known to cause strife leading to bloodshed, it is not difficult to visualize the power of languages as a divisive factor among earth's inhabitants.

But where in the world did they all come from? And why is it, when life is life the world over, that men should have so many different ways to say essentially the same thing? The study of languages in an effort to unravel this mystery is indeed a fascinating one and rather new. Philology, as such comparative study is called, is no older than the nineteenth century.

Lingual experts define language as "a system of vocal sounds by means of which ideas are passed from one to another", pointing out, however, that no one sound applies to one certain object. To be a language such sound system must be understood by others, so-called "unknown tongue" gibberish by some religionists thus being automatically ruled out.

With respect to the definition of language and its diversification during the past several centuries the philologists do quite well. But when they endeavor to

explain the *origin* of languages they come up with theories that are just as foolish as those produced by men in other fields of science when they begin wondering about the beginning of things. To start with, they are handicapped by the fact that only a few tongues have literature dating before the Christian era and the greater number have none at all. Thus, having very little circumstantial evidence upon which to proceed, they resort to that favorite pastime of so many scientists: theorizing. Likewise, they all proceed upon the same false premise that man is a creature of evolution and hence originally had no language. The results of such imaginative thinking on their part generally resolve down to three main theories, humorously named (1) the pooh-pooh theory, (2) the bow-wow theory, and (3) the ding-dong theory.

The first of these was advanced long ago by the Greek Stoics who claimed that language grew from involuntary exclamations, i.e., shouts of glee, cries of fear, etc. Hence, the name. Others advance the second theory, that language was born as a result of man's attempt to imitate animal sounds. The other theory is that language had its start through attempts at description by vocal imitation of nature, exemplified by words such as "bang", "rippling", "gurgling," etc. To its originators this "ding-dong" theory is as clear as a bell.

The Bible, itself, has no mean record in the linguistic field. Recorded originally in three languages, Hebrew, Aramaic and Greek, it has now been translated in whole or in part into more than a

thousand tongues. The information contained therein as to the origin of languages is entirely in accord with the known facts. It is admitted that there is not so much as a remote tradition of men with no speech. It is also admitted that no language now in use started from scratch, but rather that all are dialects of older languages and gradually became distinct from the parent tongue.

The inspired Record shows that the first man Adam's design included a fine set of vocal organs, chief of which was a tongue of far greater agility and flexibility than that of the other creatures. Thus, though it be true that animals have means of communication, such ability could not compare with man's far-surpassing ability to articulate speech, to divide sounds up into syllables and words and by arrangement or combination of these to have a vocabulary and speak distinctly and connectedly. Rather than learning to speak by imitating the animals, the true facts as set down in the book of Genesis are that man made almost immediate use of his powers of speech by bestowing names upon the various animal creation.

Moreover, some 1700 years after man's creation it could still be said, "And the whole earth was of one language and of one speech." (Genesis 11:1, *Am. Stan. Ver.*) United in language but not in worship of their Creator, men tried to defy God's rule by establishment of a union of mankind, a United Families organization, under one global government with headquarters at Babel. Jehovah God expressed His condemnation of this project shortly after it got under way, and He did it by sending forth His spirit or active force and confusing their language and then, by that same spirit, invisible as the wind, scattered them to all parts of the earth. (Genesis 11:6-9) Thus languages came into being.

It seems that they having kept their hands clean from that Devil-inspired

world government project, the language of God's servants Noah and Shem was not changed but that they continued speaking the same pre-Flood language first used by man in Eden. The nation of Israel was made up of descendants of Shem, and their language known as Hebrew is the main stem of the Semitic languages. It seems a reasonable deduction, therefore, that the original Hebrew should resemble to a great extent man's original language.

Factors in Language Change

After the break-up at Babylon men began drifting away from this "cradle of civilization", ranging farther and farther abroad. Certain parent languages were, no doubt, spoken for a time over large areas as roaming mankind gradually spread out over earth's surface. But, due to not being bound together by close communication ties, differences of speech, even among those of the same language group, would quickly crop out, dialects would spring up, and eventually new languages would be born, similar to and yet distinct from the parent language. Such changes could come about more rapidly than in this modern day and age when literature, newspapers and radio serve to check speech irregularities from forming into dialects or becoming too widely separated from the mother tongue.

But what are these restless factors that have kept the world's tongues in a fairly constant state of change? Distance or physical barriers, wars and conquests, perhaps climate, an effort to eliminate more difficult sounds or sound combinations, and a desire to imitate prominent or popular persons—all these have played their part.

War and conquest have played a large part in bringing about language changes. During the time of the Roman Empire its roads stretched out over the continent of Europe, reaching all the way to England. Military stations were main-

tained throughout the subjugated countries and, no doubt, the presence of Latin-speaking soldiers had its effect on the languages. In these countries the language was either replaced or affected by Latin, and thus nearly all European languages show at least some trace of Latin influence. The effect of the Norman conquest on English and that of the Moors on Spanish are well known by many.

An outstanding example of religion's influence on languages is that of Arabic, the language of Mohammedanism. As Mohammedanism gained more and more converts and spread into many countries Arabic spread along with it. It became the prevailing speech of southwestern Asia and of eastern and northern Africa.

There seems to be a definite tendency noted over a period of many years to gradually eliminate the more difficult sounds or sound combinations so that speech requires less and less energy. The human race is swiftly wearing out and even talking becomes a labor to earth's weakened creatures. It is almost invariably true that among poorer or undernourished classes the speech is slovenly and slipshod, many sounds being either eliminated or barely sounded.

Changes are far from regular. The Arabic language, for example, shows very little evidence of change throughout the years. The Old Norse spoken today in Iceland is nearly identical with that spoken in the ninth century when Iceland was colonized by the Norwegians. Rare indeed are such cases.

Other languages seem to change quite rapidly, figuratively speaking. It is stated that the languages of New Guinea change from year to year; the reason being that upon the death of their owner certain words, evidently originated by him, are thenceforth considered as taboo, thus necessitating the adoption of new ones. What a job trying to keep an up-to-date dictionary on hand—if it be that the New Guineans have such!

Language Classes and Families

Taking a general view of the language situation we find that as a whole they usually fall into one of three classes: (1) monosyllabic or isolated; (2) agglutinated; and (3) inflective. These terms are not as difficult as they sound. Monosyllabic means "one-syllabled" and finds its best example in the Chinese language, a language of one-syllabled words. In effect, Chinese has no grammar. This is due to the fact that a word becomes a part of speech by virtue of its position in the sentence. An example given is that of the word "ta", which can mean greatness, great, to be great, or greatly, depending upon its position.

One would think that with only one-syllabled words their vocabulary would be much restricted. But they overcome this by means of voice inflection while pronouncing the words. Thus the same word when pitched in a high or a low tone, or spoken with a rising or falling inflection of the voice, will in each case have a different meaning. The same system is used by Siamese, another monosyllabic language. With an immense alphabet of forty-four consonants and thirty-two vowels it does not have even two thousand words. But it does have five different voice inflections, which solves the problem. And woe be to the fellow who might be tone-deaf!

The second and largest of the three classes is the agglutinative. Just keep the word "glue" in your mind and you won't have any trouble with the meaning of this term. In the languages of this class root words are united by juxtaposition only, that is, by placing them side by side, making them contiguous, not by changing their basic form. Some of our own words that illustrate this principle are: foreground, moonstruck, warehouse, etc. They may include a whole expression, as never-to-be-forgotten, jack-of-all-trades, and others. In languages that belong to this class, however, such words are not the exception,

but rather the rule, and form the most noticeable characteristic of the language. Our own American Indian dialects belong to this group. Thus the Indian names Water-in-the-Face, Man-Afraid-of-His-Shadow, etc.

And then there are the inflective languages. Knowing that the word "inflect" means to bend or vary, it is not difficult to understand that these are languages in which the words undergo internal changes. Thus variation of nouns is accomplished by declension, verbs by conjugation. These variations are gained, not by the adding of syllables merely, but by changes within the words themselves. Thus we have "man", "men"; "foot," "feet"; "hang," "hung." Inflected languages also contain monosyllabic and agglutinated words, but the latter are usually so united or grown together that it is difficult to distinguish their various parts.

Through a comparative study of languages it is found that certain ones are related in some or many of their words. If many such roots are found in two or more languages it is considered as indicating that they are of common parent stock. Thus under careful investigation languages gradually form themselves into families. The language-families are generally listed as follows: Indo-European or Aryan, Semitic, Hamitic, Turanian or Scythian, Southeastern Asiatic, Malayo-Polynesian, South African, Central African, and American--this last not referring to the strange brand of English spoken by some citizens of the United States, but to the dialects of the American Indians.

Some Language Peculiarities

Considering individually the various tongues spoken over the globe one is amazed by the vast differences and unusual characteristics and peculiarities manifested. In a recent article in *Science Digest* entitled "We Chattering Humans" the author cites many interesting

examples, some of which are here considered as of special interest to us.

While the reputable English language contains some 700,000 words, the language of the Aranta tribe in the interior of Australia is limited to 400 or 500 words. Psychological tests have demonstrated that this tiny vocabulary is not due to lack of intelligence on the part of its aboriginal speakers. Apparently extreme isolation has enabled them to get along with such a diminutive vocabulary. Another Australian language, Kamilaroi, is well stocked with words referring to specific things but frequently has almost none for expressing general ideas. Thus, while having about twelve words for different types or colors of snakes, it has no word for "snake" itself. Though having about nine words for coconuts, each referring to a different state of maturity of the coconut, there is no word at all for just "coconut".

The language of the bushy-haired Fiji islanders is, indeed, a strange one. To add interest to a sentence it is a regular custom of the language for the speaker to toss in some extra words or sounds that are not translatable, even by him. This "double-talk" is by no means easy to decipher. Eskimo is another almost impenetrable language. The meaning of a whole sentence can be packed into one, extremely long word and yet it is only one word because none of the added or inserted syllables composing it has any meaning if considered apart from the root foundation. An example given is the word "takolerataqtainaqtoq" which means "after looking for a long while he found it at last". No book will teach one how to do this in ten easy lessons.

The African dialects also offer some interesting peculiarities. One very distinct characteristic is the use of "clicks" formed by sucking in air with the tongue and which clicks are as much a part of their words as any of our vowel sounds are to our words. These sounds resemble our own "tsk-tsk" or "tut-tut" expres-

sions or the cluck a rider makes when urging his horse along. But the African bushmen have as many as twenty-six different clicks forming integral parts of their speech. To a European or American endeavoring to learn the dialect it seems not so hard to learn to pronounce these sounds individually. But when it comes to merging them into syllables so that they fit into the flow of speech it becomes an almost impossible task.

An International Language

From these and other examples given previously it is evident that Jehovah God did a thorough job when He confused the tongues back in Babylon. They have become more and more twisted throughout the centuries. As men have come into closer relationship through improved means of communication and transportation various efforts have been made to overcome this barrier or to bridge over by adoption of an international language or so-called "universal" language. The idea is not to supplant the existing tongues—an impossible task—but rather to furnish an auxiliary language that would be simple and easy to acquire and could be employed when necessary as a vehicle of communication.

The first definite attempt at such is supposed to have occurred in 1668. The first, however, to arouse general interest was "Volapuk", invented in 1878 by an Austrian priest. Esperanto, brought forth in 1887, has probably made the most progress of any of the universal languages. Ido and Universal are two others brought forth in recent years. There is not much evidence to indicate that any of these will be accepted as an international medium of speech.

Others recommend taking one of the already-existing tongues and according it the favored position of being the international language. The field generally narrows down to six or seven possible choices. With regard to number of persons speaking the language, English

takes the number one position. It is the mother tongue of some 200,000,000 of earth's inhabitants and is the secondary language of some 200,000,000 others in non-English speaking countries. Mandarin Chinese, Arabic, official Russian, Spanish and French are widely spoken, but all have drawbacks.

But no matter what the decision be as to selection of an international language, it will not mean much to the peoples of earth. The vast majority will continue babbling in the same way as before. It is certain they will not experience any greater unity or harmony as a result of such selection. The divisive fences, linguistic ones included, are up to stay until Armageddon's storm blows them to bits, sweeping away all barriers to world unity. Then will enter a new era, a New World, and all those then living will eventually come also to unity of language.

Even today there exists among those who live in hope of that New World a language that is truly international, surmounting all barriers and being spoken by persons of many, many tongues. It is pure and not difficult to acquire if the student is sincere. It was foretold centuries past by Jehovah's prophet Zephaniah, in Zephaniah 3:9, which reads: "For then will I turn to the peoples a pure language, that they may all call upon the name of Jehovah, to serve him with one consent." (*Am. Stan. Ver.*) This surely does not refer to the dead Latin chanted by Roman priests in many nations, for such tongue fails to serve the very basic purpose of language, being unintelligible to most of its hearers. No, the pure language that Jehovah now provides is the language of the truth, free from all religious adulteration. In all nations it is spoken by Jehovah's people and unites them in giving testimony to His name and kingdom. So, if you want to learn a language, learn the language of the truth. Then speak it! It will mean life to you and to your hearers. —*Awake!* correspondent in Puerto Rico.

Pagan Pontiffs and their Keys



"THOU art the Father of princes and kings, Ruler of the world and the Vicar of Jesus Christ." With such pronouncement Eugenio Pacelli was crowned Pope Pius XII, and was given the titles "Successor of St. Peter", "Bishop of Rome," "Primate of Italy," "Supreme Pontiff of the Universal Church." The image of two keys is the symbol of this pontifical office and supreme authority. If it is true that this dignity and honor, and these appellations and titles, are bestowed on the popes of Rome because they are successors of the apostle Peter, then why would anyone refer to these pontiffs as pagan?

Will honest and critical investigation of the facts show the popes of Rome to be the successors of the apostle Peter or the successors of ancient pagan pontiffs? Will the indisputable facts show that the popes of Rome received their keys from the apostle Peter or from Rome's pile of pagan rubble? Will the historical facts show that the pope's double-peaked hat was fashioned after one worn by the apostle Peter, or was it copied after the one worn by the pagan fish-god Dagon? Is the pope's chair and crosier hand-me-downs from the apostle Peter, or are they pick-me-ups from the pagans? Sincere Catholics welcome critical investigation of the facts in order that the truth may be established:

The official Vatican Annual for 1947 throws the whole matter of succession of the Roman Catholic popes open to

question, for it removes six popes from the list, adds three new ones for the first time, questions the genuineness of two others, de-saints four others, and leaves the matter so that the present pope is not too certain if he is number 256 or 260 in the "unbroken" chain of "infallible" popes. *The Protestantse Reveille* of South Africa acidly comments: "If it is unbroken they ought at least to be able to count the links!"

The reason for the uncertainty is not only due to the obscurity of the Dark Ages but also because the earliest list of any bishops of Rome is of the latter part of the second century, according to Professors Shotwell and Loomis. (Introduction, *See of Peter*) Now no historian of any integrity or repute would accept the fill-in for that totally blank space of more than one hundred years.

There is not a thread of real evidence to prove that the apostle Peter ever set foot in Rome, let alone that he was ever the "bishop of Rome". But in digging through the mythologies of Rome, Greece and Egypt one finds that there was a "Peter of Rome" on which the succession story of the popes is built. In the Eleusinian Mysteries at Athens those initiated were instructed out of the *Book Pet-Roma*, meaning the "Book of the Grand Interpreter". This paganism seems to have originated in Egypt, where Hermes Trismegistus was worshiped as the "Interpreter of the Gods". "Peter-Roma," the "Grand Interpreter", was therefore looked upon as the one who could unlock and reveal the hidden "mysteries" of the demon religion. When the Roman Catholic Hierarchy was making a bid to unite both pagans and Christians into a single cult it seized upon this "Peter-Roma" and with a little juggling made it read "Peter of Rome" to satisfy the so-called "Christians".

First "Supreme Pontiffs" Were Pagans

Neither the apostle Peter nor any of the bishops of Rome held the title of *Pontifex Maximus* (pontiff supreme), until A.D. 378, when the Roman emperor Gratian permitted Damasus, then bishop of Rome, to use it. As for the bishop of Rome himself as claiming the title and the supremacy over the "universal" world, this development did not come until the year 440. Prior to 378 only the emperors used this title to their names, the first so-called "Christian" emperor to do so being Constantine. And where did he get the title? Not from Christianity, but from the sun-worshipping religion known as the worship of Mithra, a cult of the "Invincible Sun". It was shortly after he entered Rome as the conqueror, A.D. 312, that he assumed the title *Pontifex Maximus* and became the official head of the pagan state religion.

"The title of Pontifex Maximus," says Joseph S. Van Dyke in his book *Popery*, "is conspicuously a theft from ancient Rome. . . . The functions of the pope are precisely the same as those of the chiefest pontiff in Pagan Rome." In his *Ecclesiastical History*, Mosheim tells how "pontiffs, priests, and servants of the gods" were in charge of the heathen religions of the Roman empire in the first century. Wilkinson, the noted archaeologist of Egyptian antiquity, tells how that ancient civilization had its "Sovereign Pontiff" in the person of the king, who was worshiped as "The Representative of the Divinity on Earth", a title that the pope of Rome to this day loves to pin upon himself (the "Vicar of Christ"). From Hager, on *Chinese Hieroglyphics*, B xxxv., in the British Museum, is found evidence that even the heathen Chinese emperors assumed the position of Pontifex Maximus over their dynasties.

"Infallibility" (when the pope of Rome speaks *ex cathedra*) was first proclaimed by the Vatican Council in July, 1870. Though only then "discovered" it seems that such claim was made in behalf of all

former popes of the Vatican. However, the Roman Catholic Hierarchy was not the first to proclaim the pontiff as "infallible". All the pagan pontiffs also were considered as "infallible". The Chaldeans said that their pontiffs were "incapable of error". The Buddha pontiffs of the East were believed to be incapable of erring.

Consequently, such pontiffs of the heathen were addressed as "Your Holiness", a salutation given to the pope of Rome, but nowhere in Holy Scripture is it ever applied to the apostle Peter or his Master Christ Jesus. The same is true with the "toe kissing" ceremony. This too was originated by the pagans. Emperor Caligula, "the monster of cruelty and vice," to quote the *Encyclopædia Britannica*, loved to see his subjects grovel in the dust as they kissed his "pontifical toe".

Testing the Pope's Keys

The Roman Catholic Hierarchy makes great claims that their authority hangs from a chain of keys handed down to them from the apostle Peter. But is it not indeed strange that the earliest record claiming that the popes of Rome had keys is no older than A.D. 431? It was in that period of time when the bishop of Rome was gathering together all the discarded mythologies of the decaying Roman empire that he came across the rusty keys of Janus and Cybele, two demon gods that were supposed to have the divine means of opening the door of heaven without which no prayers could enter. Janus, the two-faced pagan god, in whose honor the month of January is named, was the "opener and shutter", the god of doors and hinges, and in the second century before Christ he got him an associate goddess, Cybele, as a helper. Look it up in *Webster's Dictionary* and you will see that the name cardinal comes from the root word *cardo*, meaning "hinge". It is the old hinge of Janus, whose keys are now found on the pope's

coat of arms, upon which the whole papal system swings! These keys of the pagans went hand in hand with the "Peter of Rome", the Opener and Interpreter, hence the myth about "St. Peter" as keeper of the "pearly gates" that is so often repeated to this day.

The Pagan Hat, Chair and Crosier

The papal pontiff, when he is decked out in his costly robes and jewels, is a far cry from both the poor fisherman Peter and the carpenter's son, Jesus, who had "not where to lay his head". (Luke 9:58) There is also something fishy about the one, who is supposed to be the "vicar of Christ", wearing his characteristic double-peaked hat or miter. When the archaeologist Layard was digging around in the antiquities of ancient Babylon and Nineveh he found pontifical miters that were worn by the pontiffs of Dagon, the fish-god of those ancient people, and the god of the Philistines. (Judges 16:23, *margin*) In form and shape and looks the pope's miter or fish-hat is identical with those worn by the demon-worshippers of Dagon. A. Trimen, Esq., author of *Church and Chapel Architecture*, when traveling in China a number of years ago, also found the supreme pagan pontiff of that land wearing a miter that was "the same, the very same, as that worn by the Roman pontiff for near 1200 years".

Moreover, the Roman Catholic Hierarchy actually claim that they have the throne-chair on which sat "pope" Peter, and they made great to-do about it, until 1662 when it was discovered that the chair was really that of a pagan pontiff on which was carved the 12 signs of the zodiac! As for the pope's *sedia gestatoria*, the portable throne-chair that is carried on the shoulders of twelve footmen, from where does this come? He that came lowly, "meek, and sitting upon an ass" had no *sedia gestatoria*. (Matthew 21:5; Zechariah 9:9) No, but the supreme pontiff of pagan Egypt rode on

one that was the exact model after which the papal sedan was copied.

The crookheaded staff or crosier carried by the pope of Rome is said to be a symbol of his office as "Shepherd of the Flock". Yet, neither Christ Jesus, "that great shepherd of the sheep," "the chief Shepherd," nor the apostle Peter, who was commanded to "feed my sheep", carried any such crosier. (Hebrews 13:20; 1 Peter 5:4; John 21:15-17) Instead of finding the crosier in the hands of Christ or Peter we find it in the hands of the pagan priests who worshiped "Nimrod the Shepherd" as the "Shepherd-king", according to Berossus of the third century before Christ. Instead of finding the crosier in the hands of any of the early Christians, we find it in the hands of the devil-worshipping astrologers and soothsayers. They used it as a divining rod, and with it they scanned the stars as they made their prognostications.

Great mystic power was ascribed to the crookheaded crosier by the Chaldean stargazers and black-magic-makers. In his *Rites and Ceremonies* Hurd, in describing the heathen temples of the Japanese and their high priests, says: "Some of them have *shepherds' crooks* in their hands, pointing out that they are the guardians of mankind against all the machinations of evil spirits." And as to surprise, the French Jesuit Huc, of the nineteenth century, got his when he traveled into Tibet and found the Lama pontiff holding in his hand a *crosier* as the ensign and symbol of his office!

It is altogether too obvious from the historical facts that the Roman Catholic pontiff has assumed an office, has adopted the practices and has made the claims held by all the pagan pontiffs that have gone before him. A search of the Scriptures will also make it obvious that the popes of Rome are not the successors of the apostle Peter, are not the vicars of Christ, and are not holding any so-called "keys" of the apostle Peter. Bible proof on this matter is found on page 24.

"THY WORD IS TRUTH"

JOHN 17:17

"The Keys of the Kingdom of Heaven"

"AND I will give to thee the keys of the kingdom of heaven. And whatsoever thou shalt bind upon earth, it shall be bound also in heaven: and whatsoever thou shalt loose on earth, it shall be loosed also in heaven." (Matthew 16:19, Catholic Douay Version) Those historic words of Jesus to His apostle Peter have been the basis of great controversy almost ever since first spoken. What did Jesus really mean by the statement?

In the Holy Scriptures the word *key* is used symbolically to represent the privilege of unlocking hidden truths and receiving an understanding of them. On another occasion Jesus used the identical word to show its meaning. The Pharisees and scribes and doctors of the Mosaic law were the religious leaders of the Israelites. It rested upon them, and was therefore their privilege and duty, to explain God's law to the people. They were unfaithful to God and fell into ignorance themselves concerning His kingdom. Worse, they took away from the people the opportunity to understand God's purposes. For that reason Jesus said to them: 'You have taken away the key of knowledge. You entered not the Kingdom yourselves, and you have hindered others from entering. Woe to you!' The favor which those religious leaders might have had Jesus now conferred upon Peter, giving him the keys of the kingdom of heaven. This meant that in due time Peter should be given understanding of the kingdom of

heaven and be privileged to explain it to others.

The Kingdom was a mystery hidden from the understanding of men for all previous centuries. Colossians 1:26, 27 speaks of it as the mystery that was hidden for ages and generations but is now made known to the saints. Primarily the kingdom of heaven means God's royal household of heaven. It consists of Christ Jesus and the 144,000 members of His faithful body. Even the personal disciples of Jesus did not begin to understand it until after He ascended up to heaven and the spirit of God was poured out upon them on the feast day of Pentecost. When Jesus was with His disciples on earth He spoke to them in parables and dark sayings; even the explanations that He gave them they did not fully grasp until after the spirit's outpouring at Pentecost.

God's purpose was to have this mystery revealed sometime, and therefore Jesus told Peter he had been selected to be the one with the privilege of first knowing the mystery concerning the development of the heirs of God's kingdom. Jesus gave Peter no literal keys of some material, so He gave him the privilege to unlock the Kingdom truths to those seeking the way into God's kingdom. Note that Jesus mentioned *keys*, which indicates more than one. The facts in interpretation of Jesus' words show there were two keys, and that they were (1) the first key showing God's purpose to take out from the Jewish nation the first members of the "kingdom of heaven" company or body; and (2) the second key disclosing God's purpose to take out

from the Gentiles or non-Jews the other part of those who will compose the "kingdom of heaven" class.

Peter and the other apostles thought Jesus was going to set up the promised kingdom with the Jews while He was on earth. On the very day of His ascension to heaven they said: "Lord, wilt thou at this time restore again the kingdom to Israel?" (Acts 1:6) Jesus' answer to that question was that the disciples should wait at Jerusalem until they had received the holy spirit and then they would know about the Kingdom. Ten days later came Pentecost. It was then at Jerusalem when Peter received the first of the keys. It was revealed to him by the holy spirit for the first time what is the mystery of the kingdom of heaven. Under inspiration of that spirit Peter told the Jews that Jesus Christ was God's approved one, the promised Messiah, the King for whom they had looked; that the Jews had put Him to death and that God raised Him out of death and exalted Him to His own right hand in heaven. 'Therefore,' Peter added, 'let all the house of Israel know assuredly that God has made Jesus both Lord and Christ, the anointed King.' Then and there Peter used the first key committed to him by Jesus to unlock to the Jews the mystery of the kingdom of heaven. Later he told them God would send Jesus Christ again, whom the heavens had to retain until the time of the setting up of the Kingdom as foretold by the holy prophets.

For three and one half years thereafter the apostles preached the gospel of God's kingdom to the Jews exclusively. Then Christ Jesus handed to Peter on earth the other key to which he had the privilege. By this he unlocked the mystery of the Kingdom to the non-Jews or Gentiles. Peter was then at Joppa. The Lord caused to be revealed to him in a vision that the gospel must now begin to be taken to the Gentiles. The day before this Cornelius, a Gen-

tile at Caesarea, had been praying to God. Then an angel appeared to him, and said: 'Your prayers and alms are come up as a memorial before God. Now send men to Joppa and call for Peter. So Peter went up to Cornelius, who told him of the vision he had received by the angel of God. "Then," according to Acts 10:34, 35, "Peter opened his mouth, and said, Of a truth I perceive that God is no respecter of persons: but in every nation he that feareth him, and worketh righteousness, is accepted with him." Later, as Peter continued to preach to Cornelius and those whom he had assembled in his house, the holy spirit fell upon all those hearing and believing. Peter then arranged for them to be baptized in water as Christians accepted with God.

Later Peter, in conference with the other disciples at Jerusalem, told them God had visited the Gentiles and had given them the gospel for the purpose of taking out of all nations a people for His name, and that these Gentiles together with the remnant of believing Jews would make up the kingdom of God under Christ Jesus. Thus, by the use of the second key which Peter received from Christ Jesus, the mystery of the Kingdom concerning the Gentiles was made clear, and the opportunity for them to enter it was opened up.—Acts 15:1-13.

For the purpose of confusing many religious people and thus turning them away from Jehovah God by causing them to give their devotion to some creature man, Satan the Devil by fraud and deception has induced many well-intentioned persons to believe that Peter has had successors to whom he handed down the keys of the Kingdom. This is a lie of Satan and a blasphemy. There can be no such thing as a successor to Peter in the use of the Kingdom keys, because he made complete use of them and finished the use of them by unlocking God's purposes and making them known first to the Jews and then to the

Gentiles, namely, God's purposes to take out the kingdom of heaven class from both Jews and Gentiles. There is no

Scripture proof that Peter ever had a successor in this. The privilege was granted to him exclusively.



Dedication at Palomar Provokes Thought



ON JUNE 3 the new 200-inch telescope atop Palomar mountain in southern California was dedicated to the service of mankind. The Rockefeller Foundation, by its gift of \$6,550,000 to the California Institute of Technology, made possible the construction of this new giant eye for probing the mysteries of space. Before some 1,000 distinguished scientists and leaders in other fields, the keynote speech of the dedication ceremonies was delivered by Dr. Raymond B. Fosdick, president of the Rockefeller Foundation. His thoughtful presentation raised many searching questions, and is worth consideration. The bulk of his speech follows, as quoted in the *New York Times*, June 4:

Twenty years ago, when the 200-inch telescope project came up before our group in New York, one of our trustees raised an objection. It was in the form of a question—a question which finds an echo everywhere today. “What are we going to do with our new knowledge?” he asked. “Aren’t we acquiring more knowledge than we can assimilate?”

The shattering events of the last two decades have underscored the relevancy of this query. Knowledge and destruction have joined in a grand alliance that has made the history of our generation a history of deepening horror.

Obviously the difficulty lies in the fact that there is no way of foretelling what particular kind of knowledge is divertible to destructive ends. There is no method of classifying knowledge into safe and unsafe categories.

All knowledge has become dangerous. Indeed, knowledge has always been dangerous; for knowledge means power, and power can

be used to degrade as well as to ennoble life of man.

Today, in dedicating this telescope, we are face to face with the problem of the unpredictable consequences of knowledge. We cannot even guess what will come from this mighty instrument, or to what end the fresh insights which we gain here will be employed.

When the giant cyclotron was built at the University of California, nobody was thinking of the atomic bomb. It was conceived as an adventure in pure research, as an attempt to advance the boundaries of understanding on a far frontier. It was a symbol of the human hunger for knowledge, an emblem of the unconquerable exploring urge within the mind of man.

And yet the cyclotron contributed materially to the development of one of the phases in the construction of the atomic bomb, just as this telescope may conceivably give us knowledge which, if we choose, we can employ in the insanity of a final war.

There is no segment of knowledge, whether in the physical sciences or the social sciences, whether in medicine or economics or astrophysics or anthropology, which cannot ultimately be employed to the detriment of mankind if that is what we deliberately elect to do with it.

Indeed, I believe that if the social sciences were developed as the physical sciences have been, we might have a weapon which, in unscrupulous hands, would be as deadly as the atomic bomb.

What is our proper course of action? Do we stop building telescopes? Do we close down our cyclotrons? Do we forbid the extension of knowledge? Do we retreat to some safe, underground existence where we can barricade ourselves against our fears and the unwholesome intrusion of new ideas?

The questions answer themselves. Any attempt to fix boundaries beyond which intellectual adventure shall not be allowed to go, even if it could succeed, would return us to an animal existence in which mere survival was the only goal.

The search for truth is, as it always has been, the noblest expression of the human spirit. Man's insatiable desire for knowledge about himself, about his environment and the forces by which he is surrounded, gives life its meaning and purpose, and clothes it with final dignity.

We are false to ourselves and to our best instincts only when we turn our backs on truth or close our eyes when it beckons.

And yet we know, deep in our hearts, that knowledge is not enough. This telescope is not enough. The vast enterprise of men that is pushing out the boundaries of knowledge in *glorious adventure on a score of frontiers*—all this is not enough. Unless we can anchor our knowledge to moral foundations, the ultimate result will be dust and ashes—dust and ashes that will bury the hopes and monuments of men beyond recovery.

Science Not Man's Enemy

The towering enemy of man is not his science but his moral inadequacy. Around the world today, laboratories supported by almost limitless resources are feverishly pushing their research in the development of physical and bacteriological weapons which overnight could turn this planet into a gigantic slaughterhouse.

On what moral basis will the decision be made to use these weapons? What ethical restraints will have developed to curb the hysteria, fright and passion of men against such a blind paroxysm of destruction? For if this final nemesis overtakes the pretensions of modern man, it will not be his science that has betrayed him, but rather the complete prostration of his moral values.

It will not be this telescope and all that it symbolizes that have led him to the doorstep of doom; it will be the impotence and immaturity of his ethical codes.

There is a sense, of course, in which the problem we face is not new. Over scores of

centuries, man's progressive accessions of power have always outstripped his capacity for control, and the gap between his morality and the physical force at his disposal has always been uncomfortably wide.

But never before have his curiosity and ingenuity led him within the space of a few years to weapons by which he could completely obliterate his own institutions and decimate the planet on which he lives.

This may seem too somber a note to be sounded at the dedication of a mighty instrument whose purpose is in line with man's noblest instincts; but in the twenty years that this telescope has been under construction, the human race has lived through its greatest tragedy.

We know now that knowledge is not a gift; it is a challenge. It is not merely an augmentation of facts; it is a test of human character. And our generation is presented with what may well be the final choice between the use of knowledge to build a rational world or its use to arm, for one last, desperate affray, the savage and uncivilized passions of mankind.

And yet I believe that in this crisis which we face, this telescope can furnish our stricken society with some measure of healing perspective. This great new window to the stars will bring us into touch with those outposts of time and space which have beckoned from immemorial ages. It will bring into fresh focus the mystery of the universe, its order, its beauty, its power. It will dramatize the questions which mankind has always asked and to which no answers have been found, and perhaps can never be found. Why are we here on this dwarf planet? Are there other planets that have burst into consciousness like our own? Is there an answering intelligence anywhere in space? Is there purpose behind the apparent meaningness and incomprehensibility of the universe? What is this divine spark of awareness which we call consciousness? And finally, in the words and spirit of the psalmist, what is man?

Nations' Fights 'Contemptible'

In the face of these supreme mysteries and against this majestic background of space and

time, the petty squabbling of nations on this small planet is not only irrelevant but contemptible. Adrift in a cosmos whose shores he cannot even imagine, man spends his energies in fighting with his fellow man over issues which a single look through this telescope would show to be utterly inconsequential.

We need in this sick world the perspective of the astronomer. We need the detachment, the objectivity, the sense of proportion which this great instrument can bring to mankind.

This telescope is the lengthened shadow of man at his best. It is man on tiptoe, reaching for relevancy and meaning, tracing with eager finger the outlines of order and law by which his little life is everywhere surrounded.

The giant eye of Palomar has been named the "Hale Telescope", after George Ellery Hale, director of Mount Wilson observatory from 1904 to 1923, who originated the idea of the 200-incher and whose leadership made possible its

design and building. Dr. Hale died in 1938. Some of the interesting details of the telescope are considered in the article starting on page 8 of this *Awake!*

Draft Registration

◆ All male persons between the ages of 18 and 25, inclusive, should register for the draft as follows:

Persons born in 1922 after August 30, 1922, will register on August 30. Those born in 1923 should register August 31 and September 1; born in 1924, on September 2 and 3; born in 1925, on September 4 and 7; born in 1926, on September 8 and 9; born in 1927, on September 10 and 11; born in 1928, on September 13 and 14; born in 1929, on September 15 and 16; born in 1930 before September 19, on September 17 and 18. Boys born after September 19, 1930, should register on the day they are 18 years old or within five days thereafter.

To Keep Abreast of Bible Knowledge

Read *The Watchtower* regularly. This 16-page magazine, issued twice monthly, is devoted to increasing knowledge concerning the Bible, its contents, origin and reliability.

The Watchtower

in a recent issue, for example, presented evidence that even the book of Genesis could have been compiled from *written* records. Yes, recent archaeological discoveries prove that even prior to the Flood men were skilled in the art of writing by means of cuneiform script. This information sheds much light on the origin of the Bible and the manner in which the sacred record was transmitted. Keep abreast of Bible knowledge by reading *The Watchtower* regularly. You may subscribe for a year for only \$1.00.

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End of Palestine Truce

◆ The situation in Palestine did not improve after Count Folke Bernadotte's plan for a federal Palestine, composed of semi-autonomous Arab and Jewish "members", had been definitely rejected by both Arabs and Jews, July 3. It was too late then to draft another plan before the end of the truce and the count tried to persuade both sides to extend the truce, sending an urgent appeal to both on July 5, and cabling the U. N. Security Council on July 6 to try to get the opposing factions to extend it. The Council sent its own appeal to the Arab League and the Jews on July 7. The next day the Jews agreed to accept prolongation of the truce for thirty days. The Arab league refused. Efforts to bring about a cease-fire for ten days also failed. In the U. N. strong action was favored, and the Arab stand was condemned as provoking a grave situation. The end of the truce saw a resumption of hostilities. A Jewish drive aimed at Nazareth resulted in the taking of a number of adjacent towns. Egyptian planes on July 9 bombed Tel Aviv, the capital of the Jewish state. Toward the middle of the month a Jewish plane bombed Cairo. The U. N. Security Council on July 15 voted to order both factions to cease fire within three days, threatening sanctions against either group for noncompliance.

Berlin Situation

◆ The first half of July saw the situation in Berlin progress backwards, as the British and American powers continued to fly food into their zones at the rate of some 2,000 tons a day, and even attempting to fly in coal, a program which cannot be kept up indefinitely and which would be inadequate to meet the situation permanently. The Russians tried to hinder the operation of the air fleet by staging fighting maneuvers in and about the path of the planes. An American note protesting against the blockade of Berlin went to the Russian ambassador at Washington July 7. It demanded the immediate lifting of the blockade. Similar notes were presented to Russian ambassadors in the French and British capitals. A reply from Moscow at length came through. It rejected the demand of the allies and stated that the Soviet Union would negotiate on the question of four-power control in relation to all Germany, but not with reference to Berlin, which, they contended, "is in the center of the Soviet zone and is part of that zone." Meanwhile Russia's representative in Berlin clamped further restrictions on highway traffic out of the city.

Communist Rift

◆ During early July the rift between Yugoslavia and the other Communist governments con-

tinued to widen as the lesser Communist states, choosing the seemingly safe course, took sides against Tito's government. First, July 1, the Cominform moved its paper from Belgrade, Yugoslavia, to Bucharest, Rumania. On the same day the Yugoslavian government warned the Bulgars about meddling in their affairs. Said the Yugoslav Central Committee: "The Bulgarian leaders assign themselves some mission in connection with the situation in the Communist party of Yugoslavia. . . . The Communist Party of Yugoslavia is not working on the principle of being assisted by missions, but on the principle of keeping to the teachings of Marxism and Leninism." July 2 the People's Front of Belgrade telegraphed Stalin and asked him to "bring the truth to light as soon as possible" in regard to the Cominform attack on Tito and its misrepresentations. Albania was warned that its actions (stopping shipments of oil and coal into Yugoslavia and suspending construction of a railroad between the two countries) were grossly offensive to Yugoslavia. Next day Albania ordered a Yugoslavian mission and military experts to leave the country. Bulgaria, though it backed the Cominform on Tito, signed a cultural pact with Yugoslavia. Russia, refusing an invitation to the Yugoslavian Communist Congress, said that Yugoslavia, in rejecting decisions of the Cominform, had placed itself outside the family of Communist parties. The Cominform on July 15, again assaulting Tito, referred to him as a betrayer of the working class, and whose regime was one of terror.

Hungary Indicts

"Voice" Listeners

◆ Listening to the "Voice of America" programs can be dangerous in Hungary, according to an early July dispatch. Five persons had been arrested, charged with "constantly listening to 'The Voice of America' and spreading its news in exaggerated form".

The American State Department (July 9) denounced the action of the Hungarian government, but the denunciation was unofficial.

Hungarian Priests Arrested

◆ Alleging a plot between the U. S. and the Vatican to undermine its control of Hungary, the Communist government (on July 2) arrested four Roman Catholic priests, including the secretary of Catholic Action for Hungary. The U. S. branch of Catholic Action was credited with making substantial relief contributions to Hungary, and the Hungarian branch had complete control of distributing these gifts. When this control was reduced to 20 percent of the total relief, the priests, it was reported, began to stir up trouble.

Italian Riots

◆ As the result of the shooting of Italy's top Communist, Palmiro Togliatti, by a Sicilian law student, July 14, disorder spread through the country. A general strike was called and Communists demanded the resignation of the Gasperi government. In Rome, Milan, Turin and other large cities trainmen quit their jobs, paralyzing important railway lines. Italian shock troops in armored cars were rushed to Venice, Turin and Genoa for fear that the disorders might develop into civil war. Reports that Togliatti was improving (July 15) brought about an easing of the tension.

Lost Austrian Railroad Cars

◆ Austria's minister of transport, on July 14, disclosed that Hungary owed Austria more than 12,000 railway cars that went over the border eastward and never came back. The Hungarian railway officials had agreed last year to return 2,000 cars out of 14,000 that had come their way, but could say nothing about the remaining 12,000. It is suspected that they may have gone farther east, beyond Hungarian reach.

Netherlands Elections

◆ The people of the Netherlands on July 7 voted for a new Parliament. Twelve parties were represented in the elections, from Communist to ultra-conservative. The Communists lost two of their ten seats in the lower house. Catholics polled 1,531,328 of 4,933,735 votes cast, and maintained their position as the nation's Number One political group, although a minority. Voting is compulsory in the Netherlands for all men and women over 23.

Finnish Elections

◆ The Finnish elections in July showed a trend away from Communism, as in the Netherlands. The Agrarians won seven seats, the Social Democrats five, but the Communists lost 13, giving these parties 56, 55 and 38 seats respectively in the national parliament. The Communists have dropped from first to third place.

Malayan Uprising

◆ Early in July terrorists raided the village of Kulai in Malaya, killing three persons and putting up posters reading, "Down with British Imperialism." They also attacked the police station and barracks. Roving bands of assassins were reported to be disposing of carefully selected victims. July 7 Commissioner General Malcolm MacDonald made a declaration of all-out action against the terrorists, whose depredations were linked with Communism. The army, navy and air force were thrown into the campaign to smash the Communist drive to seize power. Communists claim 100,000 members in Malaya. July 15 British reinforcements were being rushed from Hong Kong to help stamp out the terrorism. The government at Kuala Lumpur announced that 4,000 special constables had been recruited for the campaign against the Red guerrillas.

Privation in Mukden

and Changchun

◆ In early July 300,000 Chinese were reported to be subsisting on

starvation diet in besieged Mukden, cut off from China by Communist blockade. The poorer part of the population was existing chiefly on cattle fodder, while some ate tree leaves and bark. There was also great privation among the 500,000 residents of Changchun, the Manchurian capital, due to isolation.

U. S.-China Agreement

◆ Representatives of China and the U. S. on July 3 signed the bilateral agreement by which China will receive at once \$275,000,000 of the \$400,000,000 voted to China under the Economic Cooperation Administration plan. This sum is to be used for economic ends only. The remaining part of the total China may use without restriction and will be used to obtain military supplies.

Student Uprising in China

◆ As a result of the reports that all Northeastern students, refugees from Communist areas, were to be placed in summer military camps, several thousand students in Peiping marched in protest (July 5). They made an attack on the Municipal Council building, and the police shot into the crowd, killing five of the students.

Korean Constitution

◆ The Korean National Assembly, meeting at Seoul, on July 12 adopted the constitution of "The Democratic Republic of Korea". The constitution, calling for the fullest development of the equality of each individual "in all fields of political, economic, social and cultural life", aims to give 29,000,000 Koreans "security, liberty and happiness". Provision is made for state ownership of mines, water power, marine resources, transportation and utilities. These may, however, be privately operated, under licenses issued by the government.

Ballot Riots in Panama

◆ The presidential elections of two months previous still remaining undecided in Panama, the sit-

nation erupted in shooting and rioting in early July. The Panama government suspended constitutional guarantees on July 4 after three persons had been killed in political clashes the night before. President Enrique A. Jiménez declared "a state of siege". Former President Arnulfo Arias fled into the Canal Zone to carry on his fight against the government. On July 13 President Jiménez expressed his determination to remain in office until October 1, when his term expires.

Revolt in Peru

◆ The Peruvian government (July 5) suspended constitutional guarantees, imposing virtual martial law, because of a revolt by army garrisons at Puno and Juliaca, in southern Peru. The rebellion came to an end within three days, when its leaders fled to Bolivia and the mutinous troops surrendered. Press dispatches mentioned other uprisings in Lima and Miraflores on July 11. Rioters were dispersed by police, who shot into the air.

Mackenzie King Farewell

◆ A Canadian press dispatch of July 2, gave a partial report of the farewell speech of Prime Minister Mackenzie King in the Commons. He said: "I have made it quite clear that I have received the leadership of the party from the party itself and I intend to ask them to allow me to return to them the trust they have placed in my hands and which I have held for 29 years when the convention takes place on August 5, 6 and 7. I shall still remain in the office of prime minister." While the prime minister said he was stepping down from his position, it did not seem quite clear just when he intended to let go.

Democratic Convention

◆ With the advent of July the Eisenhower for President movement became a full-fledged boom. Many leading Democratic figures, such as James Roosevelt, Mayor

O'Dwyer of New York, and J. M. Arvey of Chicago, backed the movement. But the balloon was punctured by General Eisenhower when he issued the statement: "I will not, at this time, identify myself with any political party, and could not accept nomination for any public office or participate in a partisan political contest." The effort to "stop Truman" had failed. Political bigwigs had little hope of his winning the election. He was nominated, as he had confidently predicted, on the first ballot, even though 35 Southern delegates walked out, protesting against the civil rights plank in the Democratic platform, which said: "We call upon the Congress to support our president in guaranteeing these basic and fundamental rights: (1) the right of full and equal political participation; (2) the right to equal opportunity of employment; (3) the right of security of person; and (4) the right of equal treatment in the service and defense of our nation."

Senator A. W. Barkley, of Kentucky, was nominated by the convention for the vice-presidency.

Venezuelan President at Bolivar

◆ Two chief executives, the presidents of Venezuela and the U. S., came to Bolivar, Mo., July 5, to dedicate a \$100,000 bronze statue of the South American liberator, Simon Bolivar, a gift from the Venezuelan people.

End of U. S. Rail Dispute

◆ The White House announced (July 8) that the long-continued rail dispute had ended with the acceptance on the part of the unions of engineers, firemen and switchmen of the 15¢ hourly increase. The advance was made retroactive to November 1, 1947. This advance, together with other concessions, gave them nearly what they had been seeking. The president's press secretary stated that the railroads, which had been technically under government control, would be turned back to their legal owners for

operation. The railroads have been granted the right to charge increased rates, so that the public will foot the bill for the advance in wages.

Conclusion of Mine Strike

◆ The "captive" mine strike (mines owned by steel companies) was called off by John L. Lewis, July 13, and the 40,000 striking miners were ordered to go back to work the following morning. The mine operators had signed the terms acceptable to the unions and embodied in a contract agreed to by 90 percent of the soft coal industry.

Peak Employment in U. S.

◆ The Census Bureau, July 9, announced the highest civilian employment figure in U. S. history. There were 61,296,000 persons working at the beginning of the month. The total labor force stood at 63,479,000.

Death of Pershing

◆ Gen. John J. Pershing, director of the American Expeditionary Force in World War I, died at Washington, D. C., July 15. He was 87 years old, and was the only military figure, aside from George Washington, who had borne the title of General of the Armies.

U. S. Holiday Toll

◆ With the close of the year's biggest week-end on July 5, holiday death toll in the U. S. reached a near record high. More than 600 persons were killed from Friday evening to Monday midnight. Traffic accidents accounted for 306 of the deaths, drowning for 204. The remaining deaths were due to miscellaneous causes.

Cholera in India

◆ The government of India announced July 7 that a total of 1,819 persons had died of cholera in the United Provinces within less than a month. Medical teams were sent out to fight the epidemic.

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