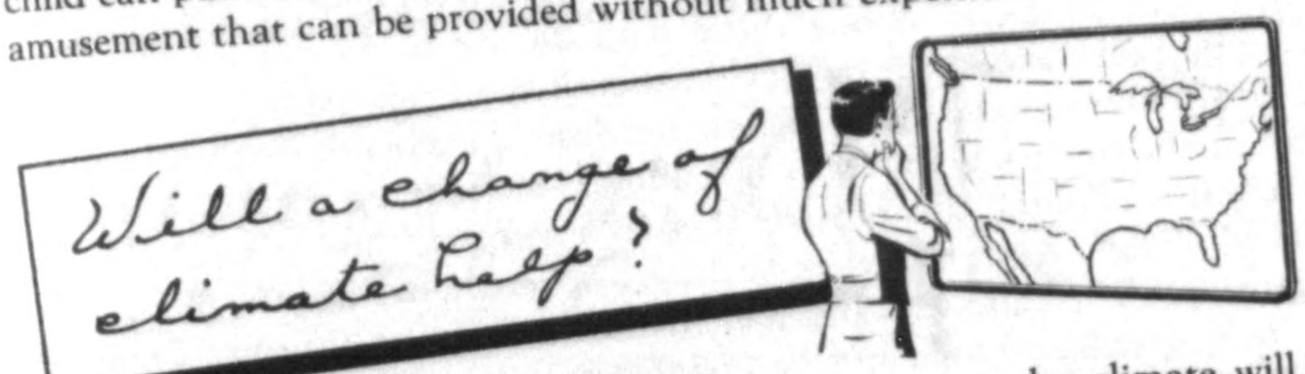
established, the regular school teachers and local librarians are often glad to suggest ways of keeping a child occupied within the activity limits the physician allows.

Most homes have on hand a good many simple things which can keep a restless child busy for hours. Old magazines, mail-order catalogs, and wallpaper sample books furnish good cutout material. Wrapping paper, ironed smooth, can be used for scrapbooks. Flower cutouts can be pasted on waste baskets, trays, etc., for the child's bedroom. All sorts of amusing animals can be made by letting a child stuff old stocking legs, tie them into desired shapes, and embroider faces on them. Paper jumping jacks can be made and tied to the end of the bedpost where the child can pull the string. These are only a few of the opportunities for amusement that can be provided without much expense.



Many parents ask whether changing to a warm, dry climate will keep a child who has had rheumatic fever from having any more attacks. A warm, dry climate has these advantages—a child is not likely to get chilled or wet, and he is in less danger of exposure to nose and throat infections. Under certain circumstances, the physician may advise taking a child to a mild climate.

However, living in a favorable climate will not, in itself, prevent further attacks. Good health habits are far more important than climate. The rheumatic child must learn the importance of keeping away from anyone with a cold or sore throat, and of protecting himself against chilling and getting wet. He must learn to eat enough of the right kinds of foods, to get enough rest, and to do everything which will help to keep him in the best possible physical condition. If heart damage exists and the physician has limited his activity, he must learn to stay within these limits. In addition, he should have frequent medical examinations.

All these things can be done in the climate where the child lives. They do not guarantee that a child will be spared repeated attacks, but

they do help him to maintain good health, and therefore to make further attacks less likely.

It has been found, in some cases, that certain drugs are useful in preventing recurrences. The physician may prescribe such treatment.

Does it always damage the heart?

Not all children who have had rheumatic fever develop rheumatic heart disease. Even among those who do, many do not develop a condition serious enough to prevent their living a normal life. In spite of this, children who have rheumatic heart disease are frequently so protected that they are literally not allowed to stand on their own feet. While it is important to provide the child with healthful surroundings and wholesome food, harm can be done by overemphasizing the physical handicap. The child who has had rheumatic fever, or has some degree of heart damage, should not be coddled but should have "the run of the house" just as other boys and girls do. In short, he should be led to enjoy his home and school life, within the prescribed limits.

Even children whose activities must be rigidly restricted because of a severely damaged heart can have a wholesome interest in life and enjoy many of the pleasures of their more active associates by the intelligent planning of understanding parents, teachers, and physicians. However, rheumatic children do need special help in choosing a life work which will give them the best chance of avoiding heart strain and recurrences of acute infection.

In ordinary rheumatic fever, then, the physician treats the infection while it lasts, which may be a long and trying time. When that has passed, frequent medical examinations and a program of rest, play, sunshine, and plenty of wholesome food will help to build up the child physically, so that he is better able to ward off sickness.

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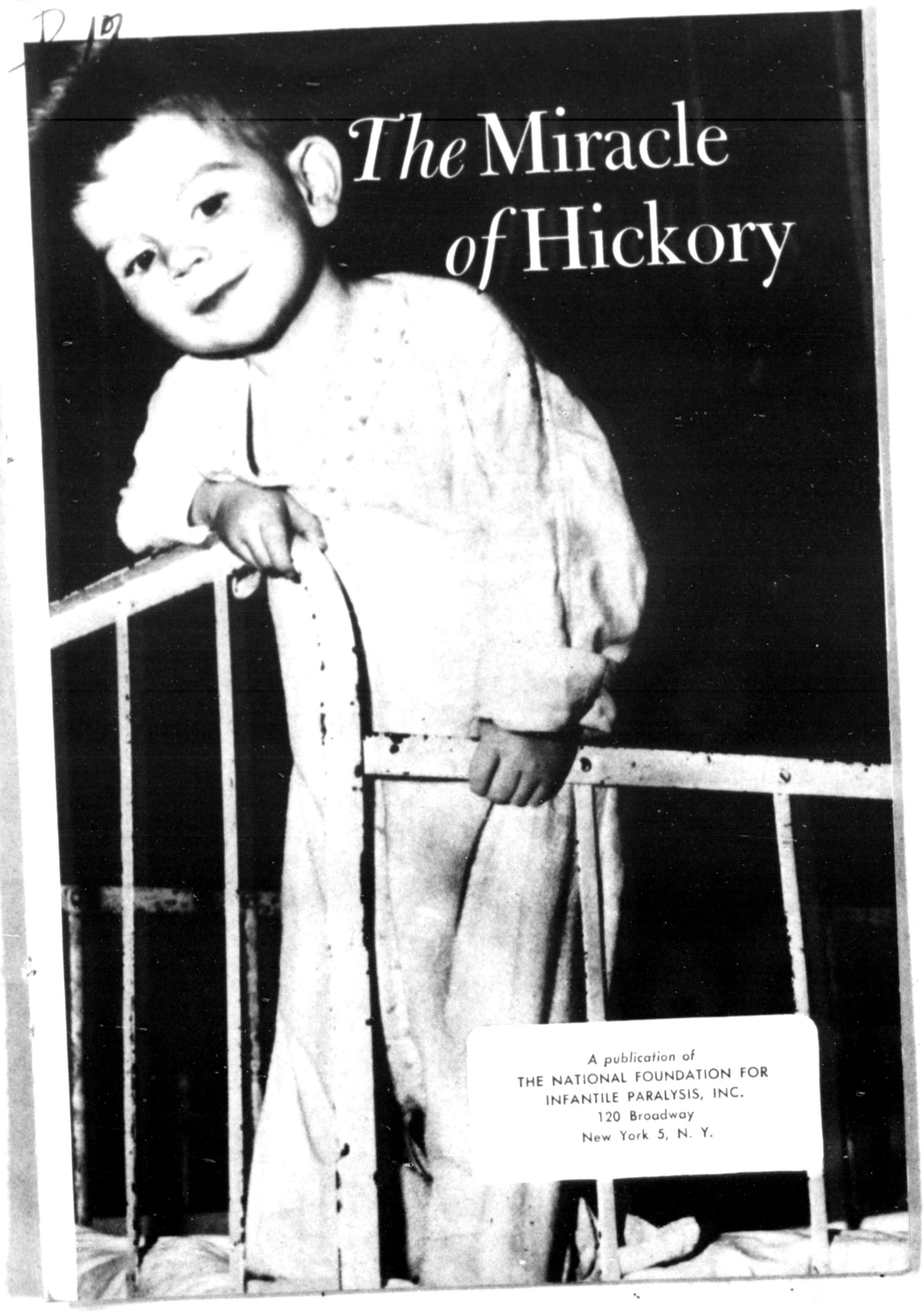


The lad shown on the front cover is a soldier's son and an excellent investment for anyone's money. Proudly, Dwight stands in his crib to prove he is almost well. Four days after the photograph was made at the Emergency Infantile Paralysis Hospital, he was home—recovered.

(Back Cover) . . . *Clear sailing. Assured of the best possible medical care by the National Foundation, this child sleeps peacefully at the Emergency Hospital.*

Publication No. 53

FOREWORD

This is the story of what happened in Hickory, North Carolina, in the summer of 1944, when infantile paralysis struck. It is a story of how 5,000,000 dimes contributed by the American people delivered a smashing counter-attack—a story of how the citizens of North Carolina, working shoulder to shoulder with The National Foundation for Infantile Paralysis, helped stem the tide of polio that swept through their state.

It is a story of how Americans, confronted with the urgent need for an isolation hospital, used their ingenuity to create, almost overnight, such an institution out of whatever came to hand so that patients would have a proper place to go for adequate treatment.

From the day its doors opened to admit the first patient, the Emergency Infantile Paralysis Hospital near Hickory has upheld the National Foundation's pledge to see to it that no victim of infantile paralysis, regardless of age, race, creed or color, shall go without care for lack of money.

North Carolina, of course, was only one of many states aided by the National Foundation in 1944 when the nation suffered its second worst epidemic in the recorded history of infantile paralysis in the United States.

The story is told in the hope that another community faced with similar problems may find inspiration, encouragement and guidance in this unique achievement of the Carolinians.

BASIL O'CONNOR, President.

Nucleus of Hickory's Emergency Infantile Paralysis Hospital, this camp building was converted into a two-ward, forty-bed hospital in less than three days.

Hickory, North Carolina: Population—15,000; location—55 miles north of Charlotte, 80 miles east of Asheville; elevation—1,163 feet; principal industries—hosiery, furniture and textiles.

That was the pleasant little city of Hickory in the foothills of the Blue Ridge Mountains on May 30, 1944, when the first case of infantile paralysis was reported in the state of North Carolina. On that day the admittance of a stricken child to the isolation ward of Charlotte Memorial Hospital was the first of a series of events that were to make the history of this city more than a record of statistics. It was the beginning of "The Miracle of Hickory."

Pacing the rising case load, ward seven was constructed in five days and quickly filled with polio patients.

Four Army hospital tents joined the original building as the need for isolation wards increased.

The case in Charlotte was from an outlying county — just a pre-season case as occasionally occurs. Three days later another arrived from another distant county. Within a day or so, three or four more stricken youngsters were carried through the hospital doors. Still there was no apprehension in North Carolina—just a half-dozen pre-season cases of infantile paralysis from widely separated counties of the Piedmont area. It was not unprecedented.

Then it happened. Like a tidal wave the plague of polio swept through the Catawba River Valley, and its victims poured into Charlotte Memorial Hospital. Youngsters with painful, useless limbs, some unable to swallow or scarcely able to breathe, they came from mining villages up in the hills, mill towns in the valley,

While carpenters were still adding on the finishing touches, nurses were preparing beds to receive patients.

from outlying farms and from urban centers. Children who had had no possible contact with each other were stricken with infantile paralysis.

It was all too evident then. North Carolina faced a serious epidemic!

Even then there was no panic. But there was swift action. That action centered in the Raleigh offices of C. H. Crabtree, North Carolina Representative of The National Foundation for Infantile Paralysis, and Dr. Carl V. Reynolds, State Health Officer.

Crabtree checked hospital facilities, called New York headquarters of the National Foundation to line up and rally all the resources available for fighting the outbreaks within the state. At the same time he began calling all of the 99 Chapters of the National Foundation in the state and putting them on the alert.

Working closely together, the State Representative of the National Foundation and state health officials advised parents through local newspapers and the radio to be on the alert for the first symptoms of polio and stressed the necessity for prompt medical attention. The symptoms were described — headache, nausea, cold, fever, stiffness of the neck, painful muscles. It was urged that all illnesses, however slight, be reported immediately to the family doctor or to the county health officer. It was emphasized that fast action in getting early care for infantile paralysis victims often prevents crippling aftereffects of the disease. Helpful sanitary and health precautions were explained in simple, common-sense language.

Situation Grows Desperate

Then to Crabtree came an urgent appeal from his Mecklenburg County Chapter to come to Charlotte, nearly two hundred miles away. The situation there had taken a desperate turn. Memorial Hospital's isolation ward was unable to cope with the number of cases. Another ward had been converted hastily to polio use. Now it also was full. A score more of stricken youngsters awaited admission, *and there was no place to put them!*

Crabtree had a problem on his hands, one that required immediate help from headquarters. On June 20 he was on the long distance wire to New York, discussing the gravity of the situation with Dr. Don W. Gudakunst, Medical Director of the National Foundation. Within 48 hours the National Foundation had sent $50,000 to North Carolina to provide for immediate hospitalization of polio victims in whatever hospital facilities could be found.

Immediately, Basil O'Connor, President of the National Foundation, assured Governor J. Melville Broughton that "every resource of this organization is at the disposal of your public health and medical authorities."

That $50,000 was merely the down payment on the National Foun-

Signs of the epidemic. The road to the Emergency Hospital is closed, and a policeman stands guard.

dation's pledge that no victim of infantile paralysis shall lack care, regardless of age, race, creed or color. Whatever more might be needed would be forthcoming instantly.

Backed by every resource of the National Foundation, Crabtree swung into action. From the Army Supply Depot at Charlotte three hospital tents were borrowed and erected on the grounds of Charlotte Memorial Hospital to handle the overflow of the two full wards. Nurses to staff the emergency tent wards were recruited for the National Foundation by the Red Cross disaster service. A physical therapist sent from New York by the National Foundation went to work in the tent wards.

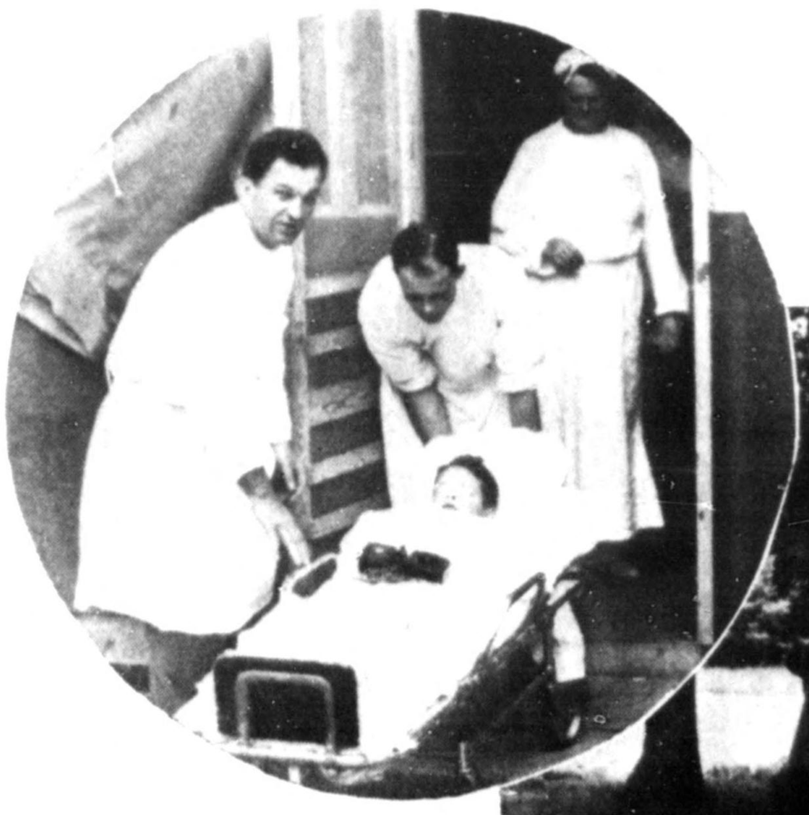
Fortunately, materials and equipment for polio treatment were on hand. They had been purchased over a period of years, against just such an emergency, by the Mecklenburg County Chapter.

But still the cases poured in. Crabtree made arrangements with the State Orthopaedic Hospital in nearby Gastonia to prepare two more isolation wards for polio patients. The Gastonia County Chapter purchased hot pack machines and obtained a supply of wool for the packs. More nurses were recruited. Another physical therapist came down from New York.

Despite these increased facilities, it was obvious that Charlotte and Gastonia would be unable to carry the full load of the epidemic. Still more space had to be found. Since more than a third of the polio cases reported up to that time were from Catawba County and the rest from six encircling counties, not from Mecklenburg and Gastonia, the logical location for a polio hospital was in that epidemic center.

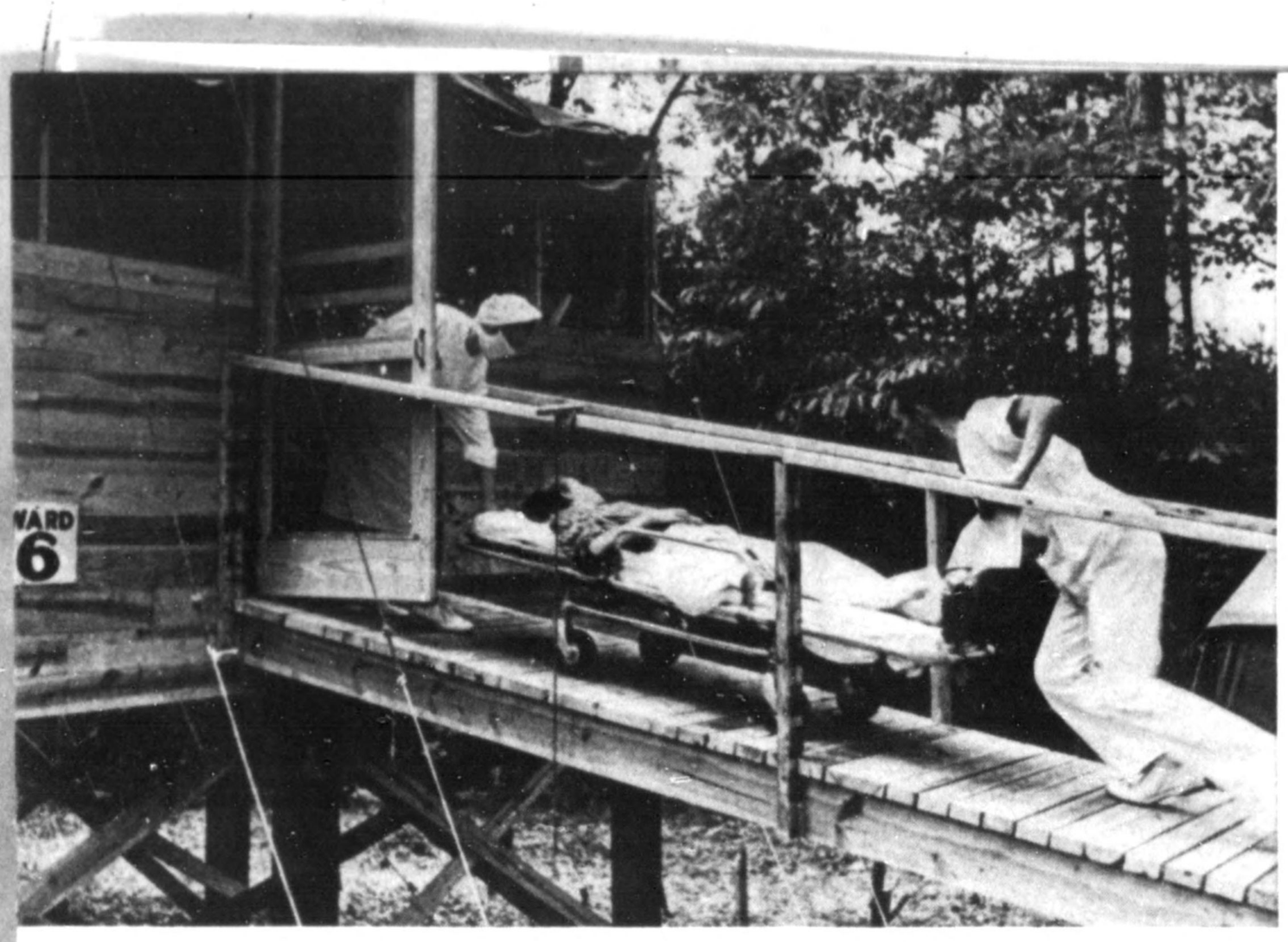
In the early days of the epidemic, polio cases came in to the hospital so fast that while one was being examined in the admission tent, others were being examined outside.

On the morning of June 22, the National Foundation's State Representative was in Hickory, in the county of Catawba. He conferred with Dr. A. Gaither Hahn, Chairman of the Catawba County Chapter, and with Dr. H. C. Whims, county health officer. They



Examination completed, Drs. Piszczek and Gucker wheel a young patient out of the admission tent for transfer to one of the wards.

As the epidemic gained ground, it became necessary to erect another admission tent to handle the rush of polio cases needing hospitalization.



A patient is wheeled into a tent ward for care and treatment.

studied the growing list of polio victims and the meager hospital facilities in the area, seeking the answer to hospital facilities within the county for them.

Out of that intense discussion in Hickory grew the Emergency Infantile Paralysis Hospital—"The Miracle of Hickory". One day it was a small summer camp for underprivileged youngsters. *Fifty-four hours later* it was a functioning hospital, receiving polio patients.

As county health officer, Dr. Whims was able to acquire immediate use of the property, just outside the city. The fifty-seven campers were hastily packed off home.

That same afternoon Dr. Whims, as director of the hospital-to-be, moved in with a crew of carpenters, plumbers, sanitation men, electricians and other workmen. Dr. Hahn, as assistant director of the embryonic hospital, undertook the job of

A mother and her sick child await their turn outside the admission tent.

The wife of a general in the invasion forces nurses her own daughter. She was just one of the mothers who brought their stricken children to the Emergency Infantile Paralysis Hospital and stayed to work as volunteer nurses, kitchen and dining room helpers and wherever willing hands could be useful.

. . . And a local minister begs and borrows electric fans for the comfort and welfare of polio victims and fighters.

A farmer brings a bushel of apples for the children in the hospital. It is his contribution to the war on polio.

Rushed from High Point ninety miles away in an hour and a half, another respirator arrives at the Emergency Hospital.

rounding up beds, blankets, sheets, wool for hot packs, washing machines and wringers, all the multitudinous articles of equipment necessary for operating a polio hospital.

On Crabtree's shoulders fell the responsibility of obtaining a staff of doctors, nurses and physical therapists for the hospital, as well as funds to keep it running. Again the North Carolina Representative telephoned the National Foundation in New York. He was assured that skilled polio fighters would be rushed to the scene. The National Foundation immediately borrowed the services of Dr. Robert L. Bennett, director of physical medicine at the Georgia Warm Springs Foundation. He arrived the next day.

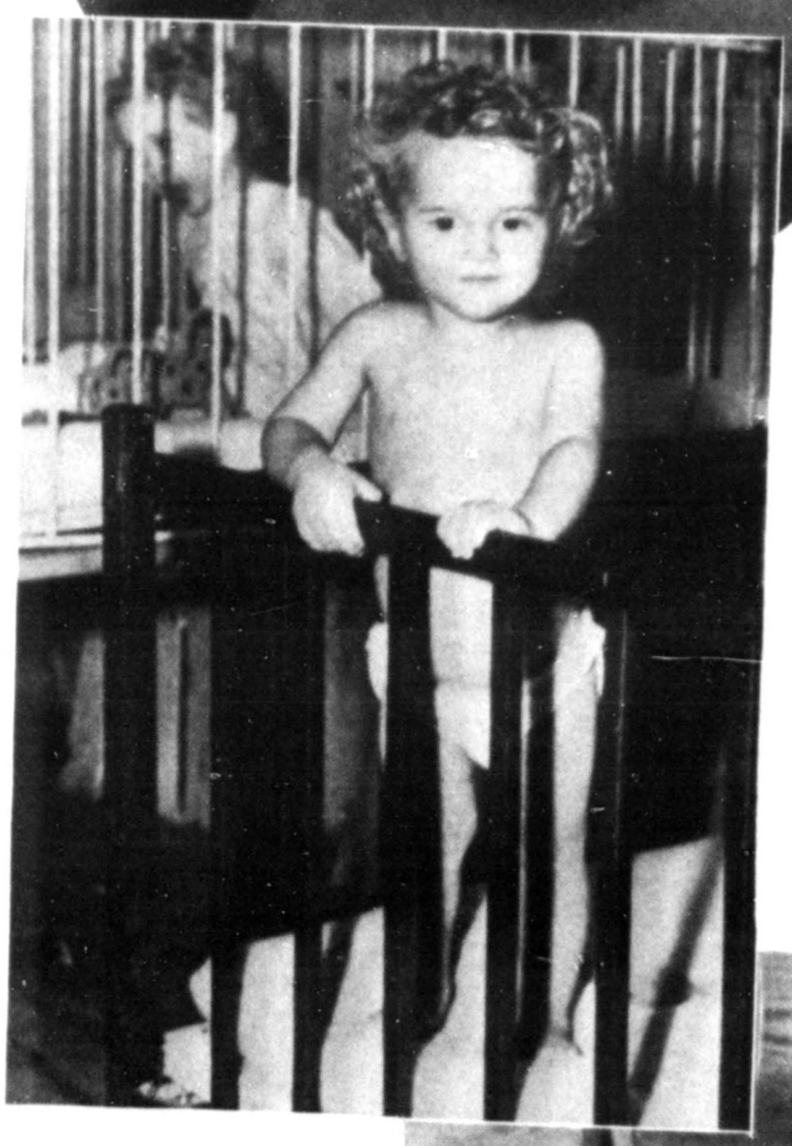
The "Miracle of Hickory" began with the opening of the hospital on June 24, less than three days after Crabtree and the two doctors had decided upon its site! Those three days saw a cyclone of activity disrupting the leisured pace of the little city of Hickory. Under hastily installed floodlights workmen labored through the night transforming the camp building into a two-ward forty-bed hospital. Sometime during the night of the 22, Dr. Hahn roused from sleep his good friend, Col. Frank Wilson, commanding officer of Moore General Hospital. Forty hospital beds were needed urgently. In the morning the beds arrived—loaned by an Army convalescent hospital to the war against polio!

Throughout that incredible 23 of June, supplies and equipment continued to stream in. Everybody did something—and did it in the nick of time.

Mills gave blankets, as well as blanket remnants to be used for hot packs.

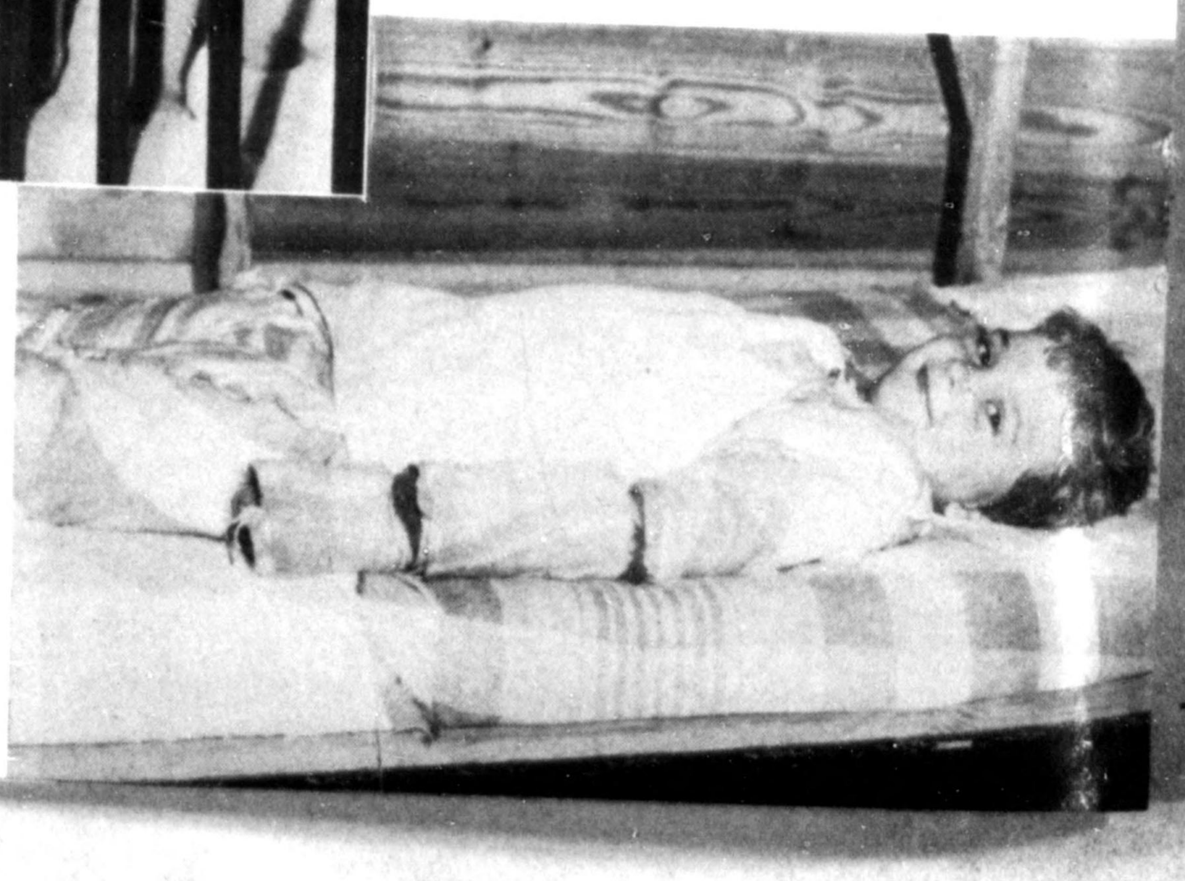
One store, asked for 50 sheets, gave 100 without charge.

These are some of the Children your Dimes and Dollars Helped



This is three-year-old Judy. Admitted to the hospital with painful involvement of the neck, back and legs, expert care and treatment helped Judy to a rapid and complete recovery.

Jerry, not quite two years old, was just learning to walk. His first efforts were interrupted by an attack of polio that crippled back and legs, but prompt hospitalization and treatment enabled Jerry to make a fast recovery.



Here's happiness and with good reason. For this seven-year-old farm boy, Kelsea, is getting well. Admitted to the hospital on July first with painful involvement of back, arms and legs, he made a complete recovery.

Logene and Minnie find their stay in the Emergency Hospital not too bad after all. These fourteen-year-old girls, stricken at about the same time, suffered the same involvement of neck, back, and legs. Strangers before meeting at the hospital, the girls have become fast friends through mutual misfortune.

Youngest polio victim of the North Carolina epidemic, baby Kenneth was just seven months old when infantile paralysis crippled his back and legs. Rushed to the hospital, the baby responded rapidly to treatment and three months later was home again, fully recovered.

Zella May thought the hot packs a good idea too. Admitted to the hospital shortly after Kelsea, with the same type of involvement, this five-year-old miss also made a rapid recovery under the expert care and treatment provided.

On an inspection tour of the North Carolina epidemic area, Dr. Henry R. Viets, Vice Chairman of the National Foundation's General Advisory Committee, and Dr. Don W. Gudakunst, Medical Director of the organization, visited the Emergency Hospital at Hickory and expressed amazement at what they saw. In all their years of epidemic experience, there had been nothing to equal the speed and efficiency of this emergency institution.

Other stores gave furniture, lamps, electric refrigerators, endless items.

Lumber yards, with depleted stocks, gave what they had to build the first wards, then borrowed lumber already sold when more was needed.

The Amercian Red Cross recruited nurses from all parts of the country for the National Foundation. Local Red Cross workrooms hummed, as sewing machines and nimble fingers raced to provide hospital gowns, caps and masks.

The water company ran new mains into the hospital from the city of Hickory, three miles away, then turned its old line over to the gas company to pipe in gas.

The Hickory fire department voluntarily installed hydrants and fire hose, stationed a chemical truck and other equipment on the grounds and maintained a twenty-four hour patrol.

The telephone company donated a switchboard, ran trunk lines in.

Linesmen voluntarily worked days and nights wiring and rewiring the hospital.

State educational authorities gave a bus to transport nurses to and from their sleeping quarters in the city, which had been hastily found and made ready for the nurses' arrival.

The police department manned the bus and maintained as well a free "emergency taxi service," on call from the hospital.

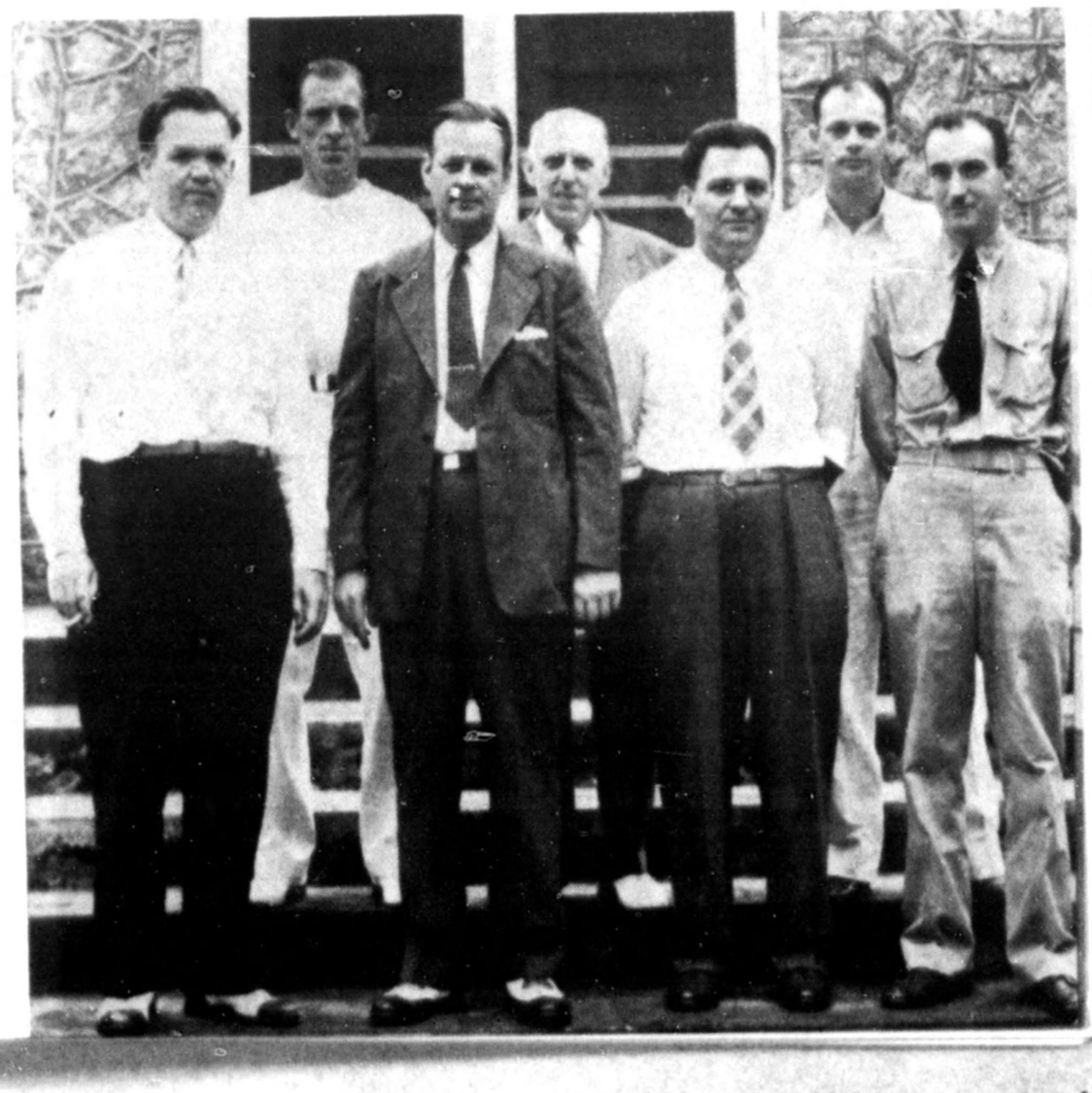
Within a few hours, the National Foundation had two respirators on hand.

When the Hickory Emergency Infantile Paralysis Hospital opened its doors fifty-four hours after the idea was conceived, workmen were still busy in one ward as the children were placed in the other. Dr. Bennett examined and admitted the first patients, advised on their care. The orthopedic nursing consultant for the Crippled Children's Bureau and two State Health Department nurses were there. Dr. Whims and his three staff assistants had spent the night setting up beds in the wards as fast as they came in. Supplies had been sorted out, equipment set in place ready for use. Floors and walls had been scrubbed and sterilized.

In short, all the hospital housework that usually takes weeks to plan and accomplish had been done in less than three days. It had been done because of the spontaneous unity of purpose and action of the National Foundation, state and local health officials and the people of Hickory. Theirs was the typical American pioneering spirit. These Carolinians proved anew that where there's a will, there's a way.

The first few days of the hospital's operation showed, again and again, the reason for the success of Hickory's incredible handling of a polio epidemic. Everybody had pitched in and helped.

Front line fighters in the polio war. Some of the men whose efforts helped stem the tide in the North Carolina epidemic. (Left to right) Dr. H. C. Whims, Catawba and Lincoln County Health Officer, and director of the Emergency Hospital; Gus Valdemar, technical director of physical therapy, Children's Hospital, Denver, Colorado; C. H. Crabtree, the National Foundation's State Representative; Dr. A. Gaither Hahn, assistant director of the hospital and Catawba County Chapter Chairman; Dr. Edward A. Piszczek, director Cook County (Ill.) Health Unit; Dr. Thomas Gucker, 3rd, orthopedist, University of Pennsylvania Hospital and Major D. J. Davis of the U.S. Public Health Service.



Workmen bringing their own tools came and asked to be allowed to work. Many of the fathers of stricken children, learning of the need for skilled workers, rushed to offer their services.

Housewives cooked food in their own kitchens and brought it to the hospital until a kitchen and dining room could be built and staffed.

Business and professional men and women dropped their accustomed activities to lend hands unaccustomed to manual labor to whatever tasks were necessary.

From outlying farms, parents and neighbors of stricken children brought offerings of fruit and vegetables.

An appeal went out for electric washing machines and wringers; from homes far and near, these treasured conveniences came into the hospital, loaned for the duration of the emergency.

Units of the State Guard voluntarily spent their Sundays working around the hospital, clearing brush from the grounds, doing odd chores.

Governor Broughton paroled thirty-two women prisoners to ease the load of hospital housework.

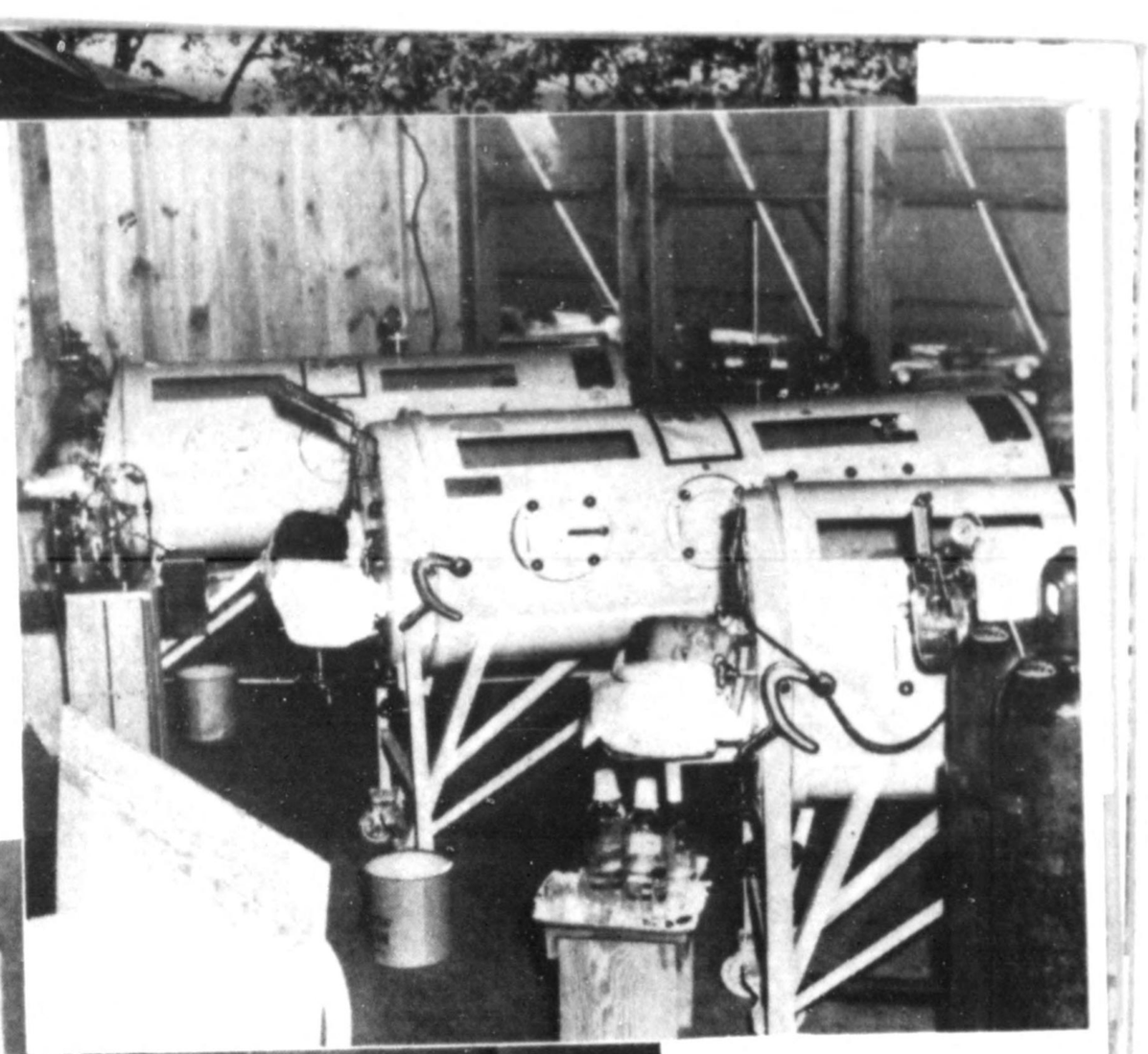
A corps of young women volunteered for office work and to keep anxious parents informed of their children's progress.

Mothers followed their children to the hospital and stayed to work as practical nurses, ward helpers, kitchen and dining room workers, or wherever willing hands could be useful.

A local minister canvassed the surrounding area for war-scarce electric fans, borrowing them from homes, offices, stores and mills. In several loads, he delivered to the hospital an astonishing assortment of fans in all sizes, shapes and styles—"volunteers" in the polio war.

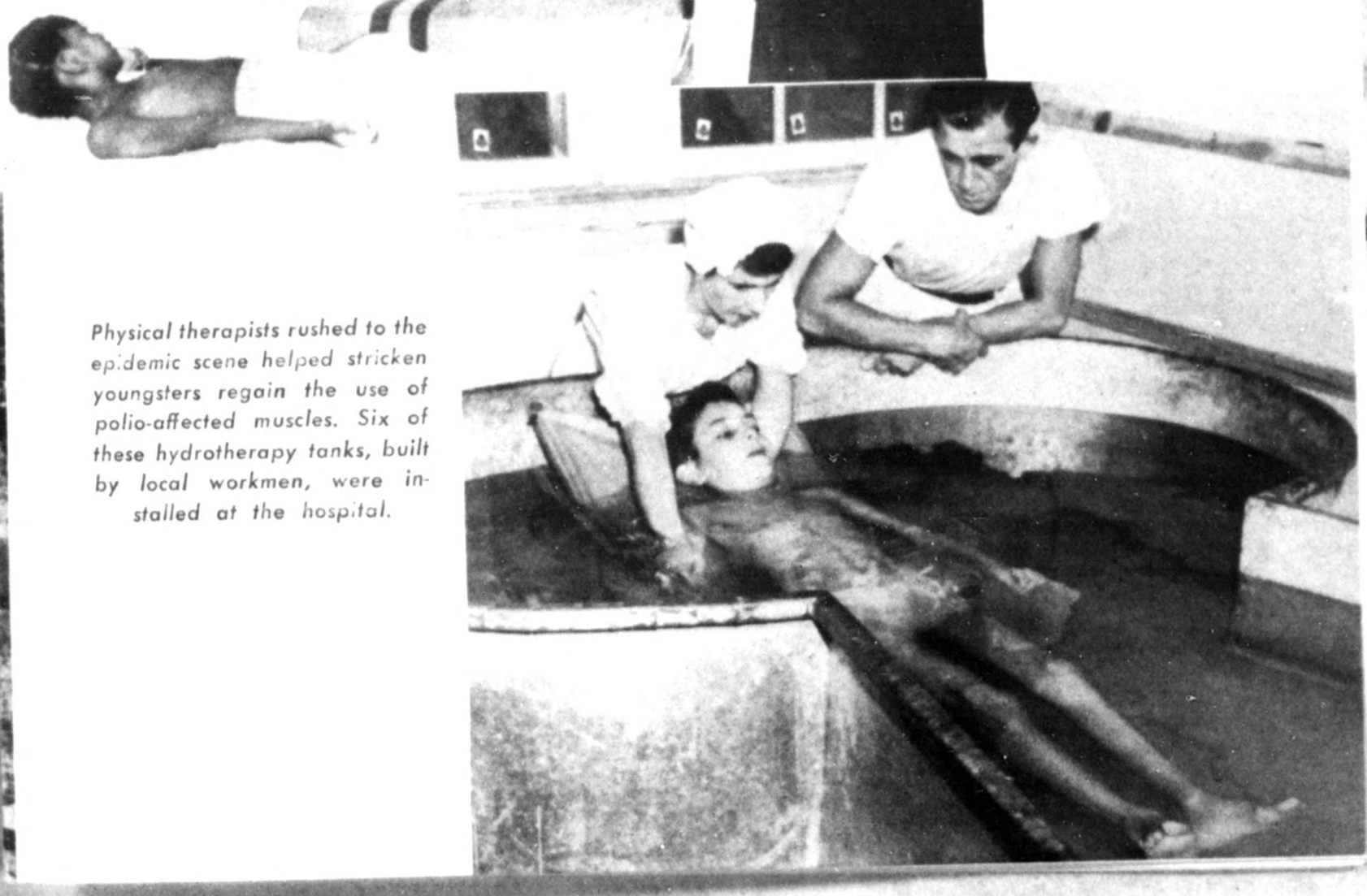
In response to an appeal, the people of the area loaned cribs. When that supply was exhausted, carpenters at the hospital made more.

While this was going on in Hickory, more skilled polio fighters, supplies and equipment were being dispatched by the National Foundation's office in New York. Doctors Thomas Gucker, 3rd, and Philip Trommer, both of Philadelphia, rushed to the scene. Physical therapists were loaned by Chapters in non-epidemic states.



Respirators rushed to the Emergency Hospital by the National Foundation saved the lives of several polio victims of the epidemic outbreak.

On the road back to health Negro and white children alike received the finest medical care and treatment in the wards.



Physical therapists rushed to the epidemic scene helped stricken youngsters regain the use of polio-affected muscles. Six of these hydrotherapy tanks, built by local workmen, were installed at the hospital.

Governor and Mrs. J. Melville Broughton visit the polio hospital and try a bit of harmonica harmony with the boys. Doctors found that harmonicas were very helpful in strengthening affected throat and chest muscles, as well as good entertainment for the patients.

Scientists, working under National Foundation grants, seeking to solve the problems of polio such as transmission, prevention and cure of the disease, went to work in the epidemic area. Among them were: Doctors Joseph Melnick, Robert Ward, Dorothy Horstmann, of Yale University; Doctor Thomas Francis, Jr., of the University of Michigan and Doctor Thomas W. Farmer, of The Johns Hopkins University.

The National Foundation's Medical Director, in cooperation with Doctor Reynolds, arranged a conference at Raleigh of health officers from nine southern states to discuss polio problems and set up uniform epidemic procedures.

Then with Dr. Henry R. Viets, Vice Chairman of the National Foundation's General Advisory Committee, Doctor Gudakunst toured the epidemic area, consulting with and advising officials of the hospital and local health agencies on ways and means of coordinating medical aid for the stricken areas.

The number of cases continued to mount. The Emergency Hospital's two wards filled rapidly. It would have to expand its facilities without delay. Again Dr. Hahn called upon the Army for help. Two Army hospital tents, a corps of ten soldiers and fifteen laborers arrived in a truck driven by a WAC. The WAC promptly donned coveralls and pitched in, helping to set up the tents.

A local contractor and his crew, although busy constructing a kitchen and dining room addition to the main building, already had set up floored platforms for the tents. A gang of twenty convicts assigned by the Governor was digging ditches for water mains and sewage disposal plants. All labored through the night, aided by floodlights strung on trees and poles, to get the new wards ready.

In the morning the less acute cases were moved out of the main building and into the two tent wards, to make way for new cases. By nightfall Wards 3 and 4 — in the newly-erected tents — were filled—and the foundations for *two more* wards had been erected beside them!

All told, the Army hospital supplied four tent wards and nine other types of tents—for examinations and admissions, for doctors' sleeping quarters, nurses' rest quarters, living quarters for other hospital personnel, out-patient clinics and the storage of supplies. All tent wards were screened and connected with the main building by a covered ramp—the corridor through which hospital traffic flowed. Each ward had its own modern sterilizing and sanitation facilities.

By the end of its first week of existence, Hickory Emergency Infantile Paralysis Hospital had 45 patients under treatment and a staff of 33 nurses. By the middle of August it had 170 patients under treatment and a staff of 120 nurses! In addition there were 11 physical therapists supplied by the National Foundation.

Building Completed in Five Days

Even July 4—Independence Day—was no holiday for the people of that polio-stricken area. On that pineclad knoll just outside Hickory, the woods echoed to the sound of hammers and saws as more ward buildings went up.

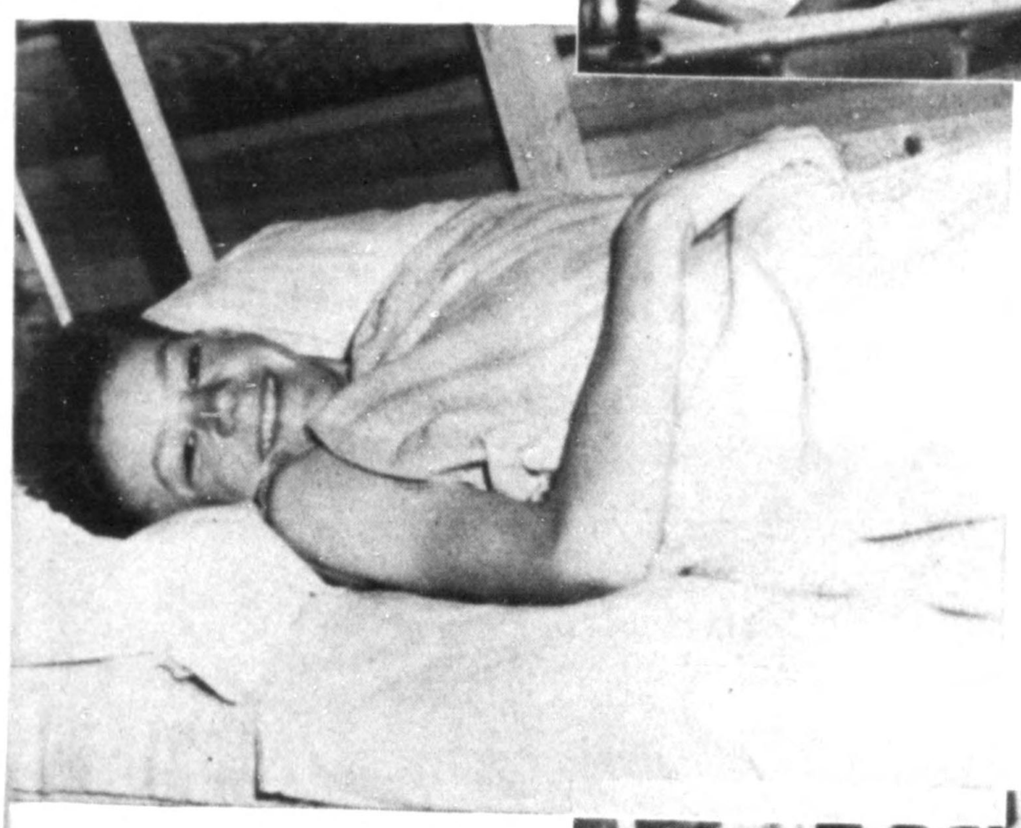
Realizing that many of the seriously involved cases would require continuing care for several months to come, the officials decided to construct a permanent building to house thirty patients. Known as Ward No. 7, it was completed in five days and convalescent infantile paralysis patients were moved in before the workmen had finished. Acute cases promptly filled the wards vacated.

Fortunately, on July 10, the second isolation ward was ready at the State Orthopaedic Hospital at Gastonia, temporarily relieving the pressure on Hickory. However, a week later this too was filled and here, as at Charlotte Memorial Hospital, every possible isolation facility was taxed to capacity.

Consequently, upon the Hickory Emergency Hospital rested the tremendous responsibility of carrying the rapidly increasing epidemic load.

SMILES OF VICTORY!

The expert care and treatment made possible by the American people's enlistment in the fight against infantile paralysis brings cheerful little Mary Ann back to normal health.



Jack, a sixteen-year-old orphan, smiles his gratitude for the care that restored him to active health. Today Jack is back on the farm with his grandfather.

Nine-year-old Eleanor, daughter of a North Carolina health official, smiles happily in the hot packs that helped her to complete recovery. The North Carolina outbreak proved again that polio knows no boundaries and strikes indiscriminately in all kinds of homes.

Dr. Edward A. Piszczek, who as director of the Cook County, Illinois, Health Unit had helped handle the Chicago epidemic of 1943, was borrowed by the National Foundation to direct care and treatment of patients at the Emergency Hospital—a hospital still very much in the rough. But in those tent wards children were receiving the best of modern medical care and treatment.

Gus Valdemar, technical director of physical therapy at the Children's Hospital, Denver, Colorado came to Hickory at the National Foundation's request to take charge of physical therapy treatment. Hydrotherapy tanks designed by Valdemar and con-

Intensive research in the midst of the epidemic. Not only does the National Foundation rush prompt aid to stricken areas, but at the same time epidemiologists — working under grants from the organization—obtain materials in the field for laboratory study. Shipped to Yale University School of Medicine those frozen flies and blood samples may yield a clue which will help track down the foe.

Watching Dr. Dorothy Horstmann take a blood sample, this family pays no heed to the camera—the boy may have polio.

structed by local workmen were quickly installed in the convalescent wards.

As the pace of the epidemic increased so did the facilities at the hospital. Even as Ward No. 7 went up, it was clear more space would be needed; another and larger structure would be necessary. This building, a permanent structure, would house a total of sixty patients in three wards. The work of construction went on relentlessly.

Financing these unavoidable extras on the epidemic bill at first presented a problem. The National Foundation provides medical and nursing care for infantile paralysis victims. It is not in the building business. Since permanent structures would remain local property when the epidemic was over, arrangements had to be made for the localities to pay for them. A building fund of $62,000 was raised from the citizens of all the counties in the affected area, each of whom had a stake in the existence of the hospital.

By November 1 the National Foundation had sent $389,474.17 in emergency epidemic aid to North Carolina and the end of need was not in sight. In addition, the National Foundation's 99 Chapters in the state had pooled part of their resources to provide an Emergency Polio Fund amounting to $57,000.

Many Recover Completely

The results achieved at Hickory speak for themselves in a report given as of September 20, 1944 by Dr. Piszczek:

Of the 344 patients treated up to that time, only 12 died—less than 3%. This is extremely low for epidemic outbreaks.

Of all the patients treated, 68% made complete recoveries, with less than 32% having residual paralysis. And of those with some involvement, or paralysis, at least half will make sufficient recovery to lead full and normal lives.

That record stands as a monument to prompt and competent care for infantile paralysis victims!

Most of the earliest victims have been discharged. All of Hickory's patients are making progress on the road to restored health. On visiting days—Wednesday and Sunday afternoons—proof of the care these children receive is amply demonstrated, as exuberant youngsters proudly show off their accomplishments in re-use of muscles crippled, so short a while ago, by polio.

A 170-bed hospital is no small institution, by any measurement. To create such a hospital in any metropolis customarily would require years of planning and building, and hundreds of thousands of dollars. To equip, staff and put such an institution into operation might re-

structed by local workmen were quickly installed in the convalescent wards.

As the pace of the epidemic increased so did the facilities at the hospital. Even as Ward No. 7 went up, it was clear more space would be needed; another and larger structure would be necessary. This building, a permanent structure, would house a total of sixty patients in three wards. The work of construction went on relentlessly.

Financing these unavoidable extras on the epidemic bill at first presented a problem. The National Foundation provides medical and nursing care for infantile paralysis victims. It is not in the building business. Since permanent structures would remain local property when the epidemic was over, arrangements had to be made for the localities to pay for them. A building fund of $62,000 was raised from the citizens of all the counties in the affected area, each of whom had a stake in the existence of the hospital.

By November 1 the National Foundation had sent $389,474.17 in emergency epidemic aid to North Carolina and the end of need was not in sight. In addition, the National Foundation's 99 Chapters in the state had pooled part of their resources to provide an Emergency Polio Fund amounting to $57,000.

Many Recover Completely

The results achieved at Hickory speak for themselves in a report given as of September 20, 1944 by Dr. Piszczek:

Of the 344 patients treated up to that time, only 12 died—less than 3%. This is extremely low for epidemic outbreaks.

Of all the patients treated, 68% made complete recoveries, with less than 32% having residual paralysis. And of those with some involvement, or paralysis, at least half will make sufficient recovery to lead full and normal lives.

That record stands as a monument to prompt and competent care for infantile paralysis victims!

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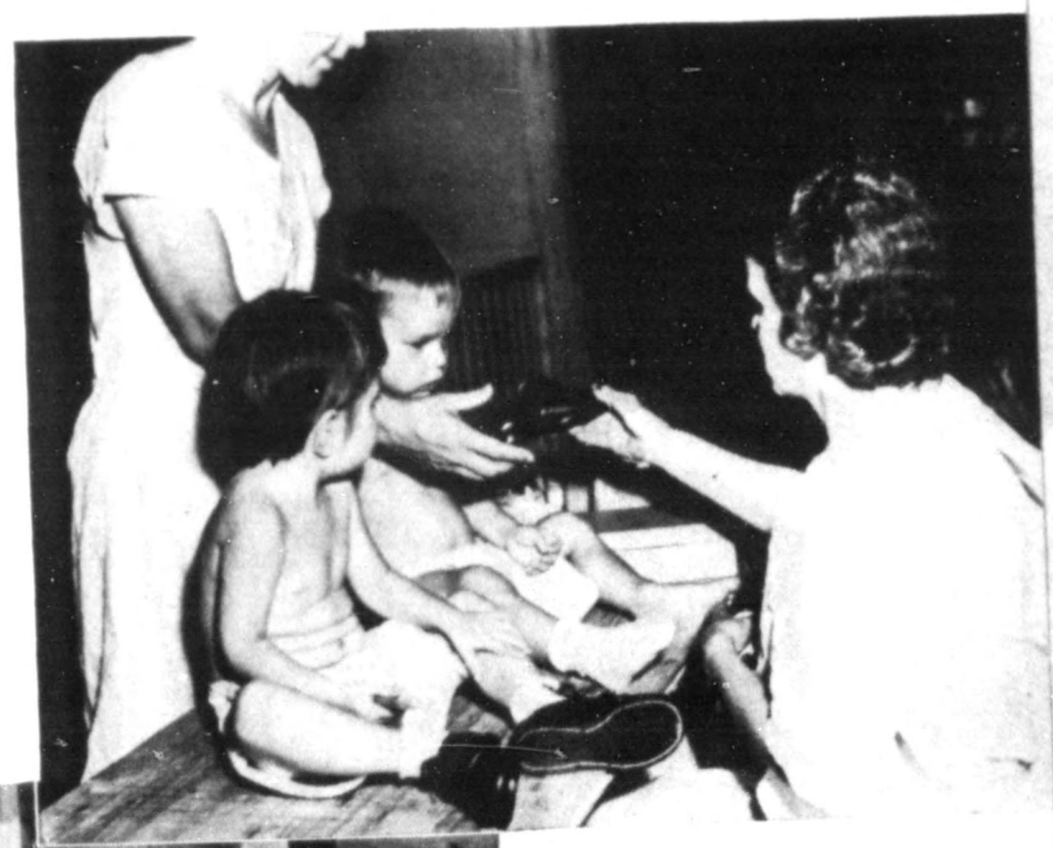
quire six months, a year, or more. Yet, in less than eight weeks, starting with one small stone camp building, the ultimate in polio care was achieved in the wooded outskirts of the city of Hickory, N. C. Born of desperation and baptized in epidemic flood, the Emergency Infantile Paralysis Hospital carried on like a veteran! And two months later it was a real veteran with 14 wards and 250 beds!

The heart of "The Miracle of Hickory" is perhaps best expressed in the words of one of the patients. She was just a young girl whose college plans were interrupted when she was stricken.

Swathed in steaming hot packs from shoulders to toes, she said—"I didn't pay much attention to the annual 'March of Dimes' Appeal before this; it wasn't very important to me. I gave something to it, but it didn't mean much. I'll pay a lot of attention to it now—it's one of the most important things in my life!"



Ready to go home. Before checking out, each youngster whose feet and leg muscles were affected by polio is fitted with a pair of orthopedic shoes.

Out in the Carolina sunshine again. Getting stronger and healthier every day through the expert care and treatment provided by the National Foundation, these tots enjoy their daily sunbath. They've won the polio battle and very soon now, they'll be going home.

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CITY OF CLEVELAND DIVISION OF HEALTH

NEWS RELEASE

FEBRUARY 15, 1947

GUARD YOUR HEART

One in every three deaths in Cleveland last year was attributed to heart disease--3191 of the total 10,210. Heart disease has been the leading cause of death in Cleveland since 1925. While it is true that there has been an apparent increase in this disease in the last twenty years, it does not apply to all age groups. People are living much longer than they used to because health procedures have been effective in curtailing infectious diseases of childhood and youth. As a result, there are many more older people in the population. In fact, since 1911, eighteen and one-third years have been added to the average span of life, *(Statistical Bulletin, Nov., 1946, Metropolitan Life Insurance Company).* It is in the older age groups that degenerative diseases are most prevalent.

COMMON TYPES OF HEART DISEASE:

The term "heart disease" covers a multitude of diseases--most of which are unrelated except as they all involve the heart or blood vessels. The most common types are those associated with infections, especially rheumatic fever and syphilis, or with high blood pressure, or with disease of the coronary arteries. Less common types are those caused by defects present at birth, or by over- or under-activity of the thyroid gland.

Rheumatic fever is the most common cause of heart disease in children, and deaths attributed to rheumatic heart disease show a notable rise in the age group of 25 to 29 years. High blood pressure, or hypertension, is the most common cause of heart disease in the middle ages. Heart disease caused by disease of the coronary arteries, which supply the heart muscle itself with blood, is most common after 50.

PREVENTION:

The ideal way to forestall the onset of heart disease is to visit a physician periodically for a complete examination. Between these check-ups, if any of the symptoms of heart disease appear, such as shortness of breath, any discomfort in the chest, especially related to exertion or excitement, or swelling of the feet and ankles, etc., a physician should be seen at once.

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Infections which may lead to heart disease should be treated first, i. e. syphilis or rheumatic fever.

Diseased tonsils or teeth should receive the attention of a qualified physician or dentist.

TREATMENT:

Although there are many potent drugs and new surgical techniques to treat heart disease, in the long run it is the way the person lives that determines how long and how happily he will live with an impaired heart. The patient should lift all removable burdens from his life--such as those imposed by fatigue, obesity, infections, and emotional upsets. He should remain under the continuous supervision of a physician.

National Heart Week was observed February 9 through 15, as part of the American Heart Association's campaign to inform the public about this disease.

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QUESTIONS AND ANSWERS ABOUT RHEUMATIC FEVER AND HEART DISEASE IN CHILDREN

Distributed by

OKLAHOMA STATE HEALTH DEPARTMENT

and

OKLAHOMA COMMISSION FOR CRIPPLED CHILDREN

RHEUMATIC FEVER AND HEART DISEASE

CLARK H. HALL, M. D.

Professor of Pediatrics, University of Oklahoma School of Medicine.

Director of Rheumatic Fever Service, Oklahoma Commission for Crippled Children.

Rheumatic fever is called a disease of childhood because most rheumatic fever patients are between the ages of 5 and 15 years. It comes most frequently to children who live in a climate where the weather changes quickly from hot to cold. Too often, the child who develops rheumatic fever is not well nourished. This does not mean that he has not had enough to eat, but that he probably has not had enough of the proper foods.

This illness is hard to understand because you cannot see a crippled heart. After a child's aches and pains are gone, he feels well and parents often think he is well. They may not see why it is important to keep him under medical supervision and follow a carefully outlined plan of treatment.

Parents always have questions to ask about rheumatic fever, but they cannot think of all of them when the physician is examining the child. In the following pages, you will find the answers to some of the questions most frequently asked.

REVISED JANUARY 1, 1944

What is the Cause of Rheumatic Fever?

The exact cause of rheumatic fever is unknown. There are several ideas, but as yet we cannot definitely say just what it is. Much work has been done on the problem in the past, and much is being done at the present. Many think it is caused by the streptococcus, but the problem is very complicated, and we will have to look to the future for the complete solution.

What Are the Symptoms?

The symptoms vary considerably and there is no definite chain of symptoms found in all cases. In the case that we call "typical" we find fever, sore throat, and in a short time, hot, painful swelling of the joints. First one joint and then another is involved. The pulse is fast and the patient is quite ill. This may last from a few days to a number of weeks. On the other hand, there may be slight symptoms, which are given very little attention by the child or the parents. There may be a varying degree of nervousness, slight aches and pains in the legs, which are often considered "growing pains" by the family. A little fever may be present, and perhaps overlooked. There may be frequent nose bleed, poor appetite, loss of weight, abdominal pain, and headache. The child may tire easily. There are other symptoms which are too technical for this discussion Your physician is familiar with them and their meaning. The important fact to keep in mind is that the mild case may

damage the heart the same as the severe case.

Chorea or St. Vitus' dance is one kind of rheumatic infection.

At What Age Is Rheumatic Fever Most Common?

Rheumatic fever may occur at any age. It is not common during the first two years of life, but from then on, it increases, reaching a peak between seven and ten years of age. There are at present approximately one million cases of rheumatic fever in the United States.

Are Growing Pains Rheumatic?

This term refers to the fleeting pains in the joints and muscles, about which children complain. They are usually in the legs, but may be in any part of the body. Many times they cause discomfort in the evening or during the night, after a hard day of play that causes fatigue. Pains may be caused by faulty posture and flat feet. All such pains should be considered seriously until they are definitely demonstrated not to be rheumatic.

What is Meant by a Heart Murmur?

The blood passes through the openings of the heart, without any audible sounds, other than those recognized as the normal sounds. If the normal relations of the heart valves, the composition of the blood, or the rapidity of the blood stream is altered, "eddies" will arise which cause the sounds heard on the surface of the chest as murmurs.

Not all murmurs mean heart disease, but all deserve careful consideration until it is clearly demonstrated that they are not significant.

What Contributory Factors Have a Bearing on the Infection?

Rheumatic fever is most common in the temperate zone. Season has a bearing. Most cases occur in the late winter and early spring, which is the season of most colds, sore throats, and other respiratory diseases. A cold, damp climate seems to favor the development of the disease.

Is Rheumatic Fever Contagious?

Rheumatic fever is not contagious in the sense that a disease like measles is contagious, but epidemics have been reported in homes where there are many children, in boarding schools, hospital wards, and military camps. The cases are usually preceded by colds and other respiratory conditions. It is fairly common to find more than one case in a family.

What Organ of the Body is Most Likely to Suffer Permanent Damage?

The heart is the organ that usually suffers permanent damage. Some physicians feel that the heart is damaged in every case, while others are of the opinion that it may escape the first attack but the probability of damage increases with every recurrence. It is difficult to say that the heart has escaped in many instances. It is important that the heart should be examined at frequent intervals, over

a long period of time, before definitely saying that no damage has resulted. In some cases, definite evidence of involvement may not appear until many months later. Over nine-tenths of all heart disease in children is rheumatic, and over one-third of the heart disease in adults is rheumatic, most of which had its origin before fifteen years of age.

Should the Tonsils and Adenoids be Removed?

The tonsils and adenoids should be removed if they are diseased, and are affecting the general condition of the patient. They should not be removed just because the child has a rheumatic infection.

What Should be done in the way of Treatment?

The most inportant feature of treatment is complete rest in bed. The individual symptoms are treated as they arise by your physician. If you have a broken arm, it is placed in a cast. Unfortunately, we cannot do such things for the heart, but we can decrease its work by keeping the patient absolutely quiet. This has to be carried out over a considerable period of time, so that the heart may recover as much as possible. When the child has improved sufficiently, he is allowed to sit up a few minutes at a time. Later, he is permitted to take a few steps. This is increased very slowly. Keep in mind the length of time that is necessary to keep a patient with tuberculosis quiet, and you have the idea. Rest and quiet alone may be the key to the patient's future.

Keep him as happy and contented as possible. When he is able, teach him handwork, such as drawing, painting, picture cutting, knitting, working of puzzles, etc., to occupy his time. This will help him to be more cheerful during the months he is quiet.

Will My Child Fully Recover?

That is a difficult question to answer. In each instance, it will be some time before an answer can be given. In every case, efforts to avoid all infections and especially colds, sore throats, and other respiratory infections, should be made. The outlook may change with every recurrence. If they can be avoided, the damage can be kept at a minimum, and the patient will be able to lead a fairly normal life. We prefer to speak of a disease arrested, rather than cured.

What Can Be Done To Prevent a Recurrence of Rheumatic Fever?

The child's general condition should be kept at the best possible level. The diet must be adequate, and properly balanced, including the vitamins. Make an effort to avoid colds and other infections. Do not let him be around anyone with a cold. See that he is immunized against the contagious diseases, where it is possible. Do not forget fresh air and sunshine. If the tonsils and adenoids are causing trouble, have them removed. See that the teeth are properly cared for. Do not let him get wet or chilled, and see that he does not lie on the

cold, damp ground. At the first sign of illness, call your physician. A patient with rheumatic heart disease should be checked thoroughly and frequently.

What Type of Diet Should the Child Have?

During the acute attack, the diet will have to be outlined by the child's physician as the case demands. Changes will have to be made from time to time. During convalescence, the diet should be well balanced for the child's needs and age. This diet includes milk, cooked fruits, vegetables, eggs and meat. The vitamins must not be overlooked. Plenty of orange juice is essential. It is important that the food be varied, well prepared, and attractively served. If it is impossible to get pasteurized milk in your community, it is essential that the milk be boiled. Do not give children raw milk.

How Much Should The Child Know About Rheumatic Fever?

That will depend upon the child. Some children are prone to worry more than others. Do not stress the serious possibilities to him, but impress him with the importance of getting as well as possible. Do not discuss his condition in his presence more than is necessary, as you do not want him to become an over-anxious, fearful child. The fear of heart disease and its dangers may cause much unhappiness to both the patient and to those around him.

Should a Child With Rheumatic Heart Disease Go To SCHOOL?

Whether the child should attend school or not, will have to be decided in every case by the physician. Some children are not able to go to school, but can do their work under the guidance of a visiting teacher. Many get along nicely at school, and others attend with all the physical activities restricted. In all cases, the child should be examined frequently to keep a check on his condition. This often changes from time to time.

These children should receive as much education as possible, as there will be better opportunities in the future for their employment in keeping with their physical ability. When the child is in school, watch his general condition, and carry out the measures already outlined. Be certain that he receives sufficient rest and sleep. The child should sleep alone. If the school is some distance from the home, transportation should be provided for him. The child should be taught to take proper care of himself because he is forming habits for the future and physical exertion may overtax the heart with serious consequences.

How Can I Help My Child Get Well?

First, see that the doctor's orders are carried out. Wise parents know that the doctor has taken care of many children who have rheumatic fever. He knows that many recover quickly if they receive the proper care and that

others have one attack after another, because they think they are well before they really are.

Do not allow your child to think that he is handicapped but encourage him in the idea that he is to limit his activities. Give him the feeling that he is sick, and help him to be happy, useful, and courageous.

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