

# Medical Authorities Helpless Against After-Effect of Atomic Bomb

## School Goes on Against Atomic Background

Continued from preceding page. The atomic bomb had been dropped along with the bomb.

At the Red Cross Hospital, Miss Sasaki was put under the care of Dr. Sasaki. Now, a month after the explosion, something like order had been re-established in the hospital; which is to say that the patients who still lay in the corridors at least had mats to sleep on and that the supply of medicines, which had given out in the first few days, had been replaced, though inadequately, by contributions from other cities.

Dr. Sasaki, who had had one seventeen-hour sleep at his home on the third night, had ever since then rested only about six hours a night, on a mat at the hospital; he had lost twenty pounds from his very small body; he still wore the ill-fitting glasses he had borrowed from an injured nurse.

Since Miss Sasaki was a woman and was so sick (and perhaps, he afterward admitted, just a little bit because she was named Sasaki), Dr. Sasaki put her on a mat in a semi-private room, which at that time had only eight people in it.

He questioned her and put down in his record card, in the correct, crumpled-up German in which he wrote all his records: "Mittegroesse. Mittelst. Korpulenz. Ermaessig. Hand. Fraktur am linken Unterarmknochen mit Wunde. Anschwellung in der linken Unterschenkelgegend. Haut und sichtbare Schleimhaute massig durchblutet und kein Odem." noting that she was a medium-sized female patient in good, general health; that she had a compound fracture of the left tibia, with swelling of the left lower leg; that her skin and visible mucous membranes were heavily spotted with petechiae, which are hemorrhages about the size of grains of rice or even as big as soybeans; and, in addition, that her head, eyes, throat, lungs, and heart were apparently normal; and that she had a fever.

He wanted to set her fracture and put her leg in a cast, but he had run out of plaster of Paris long since. He had stretched her out on a mat and he had given her aspirin for her fever, and glucose intravenously, and diazepam orally for her undernourishment (which he had not entered on her record because everyone suffered from it). She exhibited only one of the queer symptoms so many of his patients were just beginning to show—the spots hemorrhages.

Dr. Fujii was still pursued by bad luck, which still was connected with rivers. Now he was living in the summer house of Mr. Okuma in Fukaya. This house clung to a steep bank of the Ota River. Here, his injuries seemed to make good progress, and he even began to treat refugees who came to him from the neighborhood, using medical supplies he had retrieved from a cache in the suburbs.

He noticed in some of his patients a curious syndrome of symptoms that cropped out in the third and fourth weeks, but he was not able to do much more than swathe cuts and burns. Early in September it began to rain, steadily and heavily. The river rose.

On September 17th, there came a cloudburst and then a typhoon, and the water crept higher and higher up the bank. Mr. Okuma and Dr. Fujii became alarmed and scrambled up the mountain to a peasant's house.

Down in Hiroshima, the flood took up where the bomb had left off—sweeping away bridges that had survived the blast, washed out streets, undermined foundations of buildings that still stood—and ten miles to the west, the One Army Hospital, where a team of experts from Kyoto Imperia University was studying the delayed afflictions of the patients, suddenly slid down a beautiful, pine-clad mountain-side into the Inland Sea and drowned most of the investigators and their mysteriously diseased patients alike.

After the storm, Dr. Fujii and Mr. Okuma went down to the river and found that the Okuma house had been washed altogether away. Because so many people were suddenly feeling sick nearly a month after the atomic bomb was dropped, an unpleasant rumor began to move around, and eventually it made its way to the house in Kobe where Mrs. Nakamura lay half dead.

It was that the atomic bomb had deposited some sort of poison on Hiroshima which would give off deadly emanations for seven years; nobody could go there all that time. This especially upset Mrs. Nakamura, who remembered that in a moment of confusion on the morning of the explosion she had literally sunk her entire means of livelihood, her Sankoku sewing machine, in the small cement water tank in front of what was left of her house; now no one would be able to go and fish it out.

Up to this time, Mrs. Nakamura and her relatives had been quite resigned and passive about the moral issue of the atomic bomb, but this rumor suddenly aroused them to more hatred and resentment of America than they had felt all through the war.

Japanese physicians, who knew a great deal about atomic fission (one of them owned a cyclotron), worried about lingering emanations at Hiroshima, and in mid-August, not many days after President Truman's disclosure of the type of bomb that had been dropped, they entered the city to make investigations.

The first thing they did was roughly to determine a center by

observing the side on which telephone poles all around the heart of the town were scorched; they settled on the torii gateway of the Gokoku Shrine, right next to the parade ground of the Chugoku Regional Army Headquarters.

From there, they worked north and south with Lauritzen electroscopes, which are sensitive to both beta rays and gamma rays. These indicated that the highest intensity of radioactivity, near the torii, was 4.2 times the average natural "leak" of ultra-short waves for the earth of that area.

The scientists noticed that the flash of the bomb had disclosed concrete to a light reddish tint, had scaled off the surface of granite, and had scorched certain other types of building material, and that consequently the bomb had, in some places, left prints of the shadows that had been cast by its light.

The experts found, for instance, a permanent shadow thrown on the roof of the Chamber of Commerce Building (220 yards from the torii center) by the street-lamp rectangular tower; several others in the lookout post on top of the Hypothec Bank (2,050 yards); another in the tower of the Chugoku Electric Supply Building (800 yards); another projected by the handle of a gas pump (2,850 yards); and several on granite tombstones in the Kokoku Shrine (335 yards).

By triangulating these and other such shadows with the electroscopes, the scientists determined that the exact center was a spot a hundred and fifty yards south of the torii and a few yards southeast of the pile of ruins that had once been the Shima Hospital.

(A few vague human ailments were found, and these gave rise to stories that eventually included fancy and precise details. One story told how a patient on a stretcher was immobilized in a kind of bed relief on the stone facade of a bank building on which he was at work. In the act of dipping his brush into his paint can; another, how a man and his cart on the bridge near the Museum of Science and Industry, almost under the center of the explosion, were sent down an embankment, which made it clear that the man was about to whip his horse.)

Starting east and west from the actual center, the scientists, in early September, made new measurements, and the highest radiation they found this time was 9.0 times the natural "leak."

Since radiation of at least a thousand times the natural "leak" would be required to cause serious effects on the human body, the scientists announced that people could enter Hiroshima without any peril at all.

As soon as this reassurance reached the household in which Mrs. Nakamura was recuperating herself—or, at any rate, within a short time after her hair had started growing back again—her whole family relaxed their extreme hatred of America, and Mrs. Nakamura sent her brother-in-law to look for the sewing machine. It was still submerged in the water tank, and then he brought it home, almost to the dismay that it was all rusted and useless.

By the end of the first week in September, Father Kleinsorge was in bed at the hospital with a fever of 102.2, and since he seemed to be getting worse, his colleagues decided to send him to the Catholic International Hospital in Tokyo.

Father Clellach and the rector took him as far as Kobe and a Jesuit from that city took him the rest of the way, with a message from a Kobe doctor to the Mother Superior of the International Hospital: "Think twice before you give this man blood transfusions, because with atomic radiation, you aren't sure that if you stick needles in them, they'll stop bleeding."

When Father Kleinsorge arrived at the hospital he was terribly pale and very shaky. He complained that the bomb had upset his digestion and given him abdominal pains. His white blood count was three thousand (five to seven thousand is normal), he was seriously anemic, and his temperature was 104.

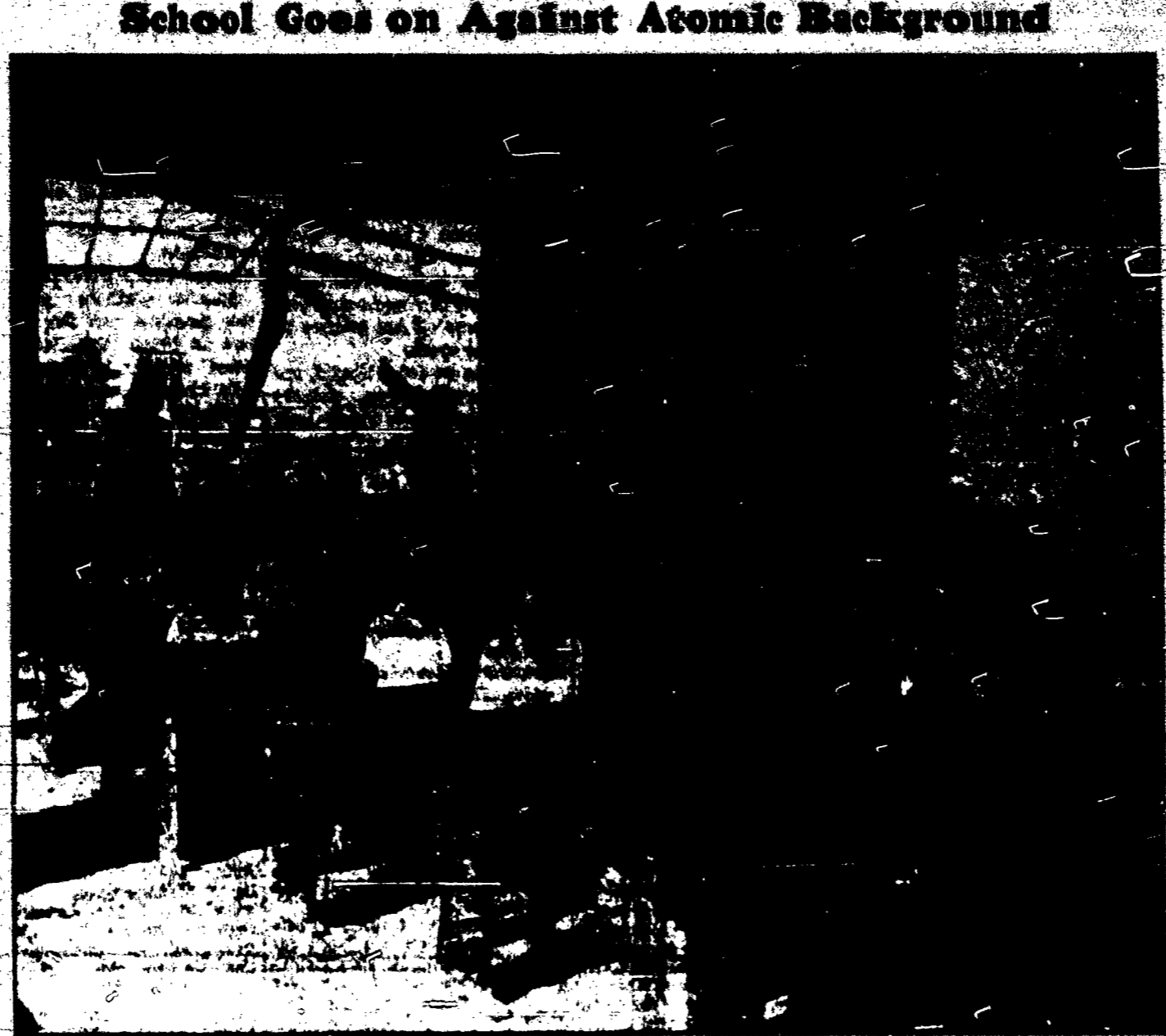
A doctor who did not know much about these strange manifestations of atomic radiation was one of a handful of atomic patients who had reached Tokyo—come to see him, and to the patient's face he was most encouraging. "You'll be out of here in two weeks," he said. But when the doctor got out in the corridor, he said to the Mother Superior, "He'll die. All these bomb people die—you'll see. They go along for a couple of weeks and then they die."

The doctor prescribed suralimentation for Father Kleinsorge. Every three hours, they forced some eggs or beef juice into him, and they fed him all the sugar he could stand.

They gave him vitamins, and iron pills and arsenic (in Pope's solution) for his anemia. He complained both of the doctor's predictions; he neither died nor got up in a fortnight.

Despite the fact that the message from the Kobe doctor depicted him of transmutations, which would have been the most useful therapy of all, his fever and his digestive troubles cleared up fairly quickly. His white count went up to 10,000, but early in October it dropped again to 6,500; then, in ten days, it suddenly climbed above normal, to 8,800; and it finally settled at 5,800.

His ridiculous scratches puzzled everyone. For a few days, they would mend, and then, when he moved around, they would open up



Almost a year after the first atomic bomb ever loosed against a people in warfare burst over Hiroshima, wiping out 60 per cent of the city. At least it does for these pupils in a Hiroshima classroom, through the window of which may be seen some of the ruins of the once-proud city. Because of lack of materials, reconstruction has not been attempted. Rude shacks have sprung up in the devastated areas and occasionally there are clean compounds, during which hundreds of bodies are dug out of ruins. In one corner of the city such a compound last month uncovered 1,000 corpses. It is estimated that from six to ten thousand bodies still are beneath the debris. (UPI.)

again. As soon as he began to feel well, he enjoyed himself immensely.

In Hiroshima he had been one of thousands of sufferers; in Tokyo he was a curiosity. Young American Army doctors came by the dozen to observe him. Japanese experts questioned him. A newspaper interviewed him. And one, the confused doctor came and shook his head and said, "Blasting away these atomic-bomb people."

Mrs. Nakamura lay in bed with Mr. Kleinsorge. They both continued sick, and though Mrs. Nakamura vaguely sensed that their trouble was caused by the bomb, she was too poor to see a doctor and so never knew exactly what the matter was.

Without any treatment at all, but merely resting, they began gradually to feel better. Some of Mr. Kleinsorge's hair fell out, and he had a tiny burn on her arm which took months to heal.

The boy, Yoshio, and the older girl, Yachko, seemed well enough, though they, too, lost some hair, and occasionally had bad headaches. Yoshio was still having nightmares, always about the nine-year-old merchant, Hideo Otsuki, who had been killed by the bomb.

On his back with a fever of 104, Mr. Tanimoto worried about all the funerals he ought to be conducting for the deceased of his church.

He thought he was just overtired from the hard work he had done since the bombing, but after the fever had persisted for a few days, he sent for a doctor.

The doctor was too busy to visit him in Ushida, but he dispatched a nurse, who recognized his symptoms as those of mild radiation disease and came back from time to time to give him injections of Vitamin B-1.

A Buddhist priest with whom Mr. Tanimoto was acquainted called on him and suggested that mortification might give him relief; the priest showed the mortification to himself the next day, and treatment by setting fire to a twist of the stimulant herb moxa placed on the wrist pulsed.

Mr. Tanimoto found that each moxa treatment temporarily reduced his fever one degree. The nurse had told him to eat as much as possible, and every few days his mother-in-law brought him vegetables and fish from Tenzu, twenty miles away, where she lived. He spent a month in bed, and then went ten hours by train to his father's home in Shikoku. There he rested another month.

Dr. Sasaki and his colleagues at the Red Cross Hospital watched the unprecedented disease unfold and at last evolved a theory about its nature. They decided, three stages. The first stage had been all over before the doctors even knew they were dealing with a new sickness; it was the direct reaction to the bombardment of the body, at the moment when the bomb went off, by neutrons, beta particles, and gamma rays.

The apparently injured people who had died so expeditiously in the first few hours or days had succumbed in this first stage. It killed ninety-five per cent of the people within a half mile of the center, and many thousands who were farther away.

The rays simply destroyed anything that was not made of degenerate and broke their walls. Many people who did not die right away came down with nausea, headache, diarrhea, malaise, and fever, which lasted several days. Doctors could not be certain whether some of these symptoms were the result of radiation or nervous shock.

The second stage set in ten or fifteen days after the bombing. The main symptom was falling diarrhea and fever, which in some cases went as high as 106, came next. Twenty-five to thirty days after the explosion, blood disorders appeared: gums bled, the white-blood-cell count dropped sharply, and petechiae appeared on the skin and mucous membranes.

The drop in the number of white corpuscles reduced the patient's capacity to resist infection, so open wounds were unusually slow in healing and many of the sick developed sore throats and eczema.

The two key symptoms, on which the doctors came to base their prognosis, were fever and the lowered white-corpuscle count. If fever remained steady and high, the patient's chances for survival were poor.

The white count element always dropped below four thousand; a patient whose count fell below one thousand had little hope of living. Toward the end of the second stage, if the patient survived, anemia, or a drop in the red blood count, did not set in.

The third stage was the reaction that came when the body struggled to compensate for its illness—when, for instance, the white count not only returned to normal but increased to much higher than normal levels. In this stage, many patients died of complications, such as infections in the chest cavity.

Most burns healed with deep layers of pink, rubbery scar tissue, known as keloid tumors. The duration of the disease varied, depending on the patient's constitution and the amount of radiation he had received. Some victims recovered in a week; with others the disease dragged on for months.

As the symptoms revealed themselves, it became clear that many of them resembled the effects of overdoses of X-ray, and the doctors based their therapy on that likeness.

They gave victims liver extract, blood transfusions, and vitamins, especially B1. The shortage of supplies and instruments hampered them.

Allied doctors who came in after the surrender found plasma and penicillin very effective. Since the blood disorders were, in the long run, the predominant factor in the disease, some of the Japanese doctors evolved a theory as to the cause of the delayed sickness.

They thought that perhaps gamma rays, entering the body at the time of the explosion, made the phosphorus in the victims' bones radioactive, and that they in turn emitted beta particles, which, though they could not penetrate far through flesh, could enter the bone marrow, where blood is manufactured, and gradually tear it down.

Whatever its source, the disease had some baffling quirks. Not all the patients exhibited all the main symptoms. People who suffered from skin burns were protected, to a considerable extent, from radiation sickness. Those who had lain quietly for days or even hours after the bombing were much less liable

to get sick than those who had been active. Gray hair seldom fell out, and, as if nature were protecting man against his own ingenuity, the reproductive processes were affected for a time: men became sterile, women had miscarriages, stimulation stopped.

For ten days after the flood, Dr. Fujii lived in the peasant's house on the mountain above the city. Then he heard about a vacant private clinic in Kaitachi, a suburb to the east of Hiroshima.

He bought it at once, moved there, and hung out a sign in English, in honor of the conqueror: M. FUJII, M.D., Medical & Venereal.

Quite recovered from his wounds, he soon built up a strong practice, and he was delighted, in the evenings, to receive members of the occupying forces, on whom he lavished whiskey and practiced English.

Giving Miss Sasaki a local anesthetic of procaine, Dr. Sasaki made an incision in her leg on October 23rd, to drain the infection, which still lingered on eleven weeks after the injury.

In the following days, so much pus formed that he had to dress the opening each morning and evening. A week later, she complained of great pain, so he made another incision; he cut still a third, on November 9th, and enlarged it on the twenty-sixth.

All this time, Miss Sasaki grew weaker and weaker, and her appetite fell low. One day, the young doctor who had her in his treatment of the Manassan, at Hantsuichid, came to visit her; he told her that he was going to Kyushu but that when he came back, he would like to see her again.

She didn't care. Her leg had been so swollen and painful all along that the doctor had not even tried to set the fractures, and though an X-ray taken in November showed that the bones were mending, she could not get under the sheet that her left leg was nearly three inches shorter than her right and that her left foot was turning inward.

She thought often of the man to whom she had been engaged. Someone told her to be back from overseas. She wondered what he had heard about her injuries that made him stay away.

Father Kleinsorge was discharged from the hospital in Tokyo on December 16th and took a train home. On the way, two days later, at Yokogawa, a stop just before Hiroshima, Dr. Fujii boarded the train.

It was the first time the two men had met since before the bombing. They sat together. Dr. Fujii said he was going to the annual gathering of his family, on the anniversary of his father's death.

When they started talking about their experiences, the Doctor was quite entertaining, as he told how his places of residence kept falling into rivers. Then he asked Father Kleinsorge how he was, and the Jesuit talked about his stay in the hospital. "The doctors told me to be cautious," he said. "They ordered me to have a two-hour nap every afternoon."

ment direction, had gone to work at last in the city hall. Citizens who had recovered from various degrees of radiation sickness were coming back by the thousands by November 1st. The population, mostly crowded into the outskirts, was already 187,000, more than a third of the wartime peak—and the government set it motion all kinds of projects to get them to work rebuilding the city.

It had been a year since the city had been cleared of the streets and others to gather scrap iron, which they sorted and piled in mountains opposite the city hall.

Some returning residents were putting up their own shanties and huts, and planting small squares of winter wheat beside them, but the city also authorized and built four hundred one-family "bar-racks." Utilities were repaired, electric lights shone again, tram tracks were running, and employees of the waterworks fixed seven thousand leaks in mains and plumbing.

A Planning Conference, with an enthusiastic young Military Government officer as chairman, John H. Montgomery of Kalanazoo, as its adviser, began to consider what sort of city the new Hiroshima should be.

The ruined city had found itself, and had been so inviting for so many years because it had been one of the most important military command and communications centers in Japan, and would have become the Imperial headquarters had the islands been invaded and Tokyo been captured.

Now there would be no huge military establishments to help revive the city. The Planning Conference, at a loss as to just what importance Hiroshima could have, fell back on rather vague cultural and paving projects. It drew maps with avenues a hundred yards wide and thought seriously of preserving the half-ruined Museum of Science and Industry more or less as it was, as a monument to the disaster, and naming it the Institute of International Azdly.

Statistical workers gathered what figures they could on the effects of the bomb. They reported that 78,100 people had been killed, 13,933 were missing, and 37,421 had been injured.

No one in the city government pretended that these figures were accurate—though the Americans accepted them as official—and as the months went by and more and more hundreds of corpses were dug up from the ruins, and as the number of unclaimed units of ashes at the Zenpoji Temple in Koi rose to ten thousand, people had lost their lives in the bombing.

Since many people died of a combination of causes, it was impossible to figure exactly how many were killed by each cause, but the statisticians calculated that about twenty-five per cent had died of direct burns from the bomb, about fifty per cent from other injuries, and about twenty per cent as a result of radiation effects.

The statisticians' figures on property damage were more reliable: sixty-two thousand out of ninety thousand buildings destroyed, and six thousand more damaged beyond repair.

In the heart of the city, they found only five modern buildings that could be used again without major repairs. This small number was by no means the fault of times Japanese construction.

In fact, since the 1920 earthquake, Japanese building regula-

tions had required that the roof of each large building be able to bear a minimum load of seventy pounds per square foot, whereas American regulations do not normally specify more than forty pounds per square foot.

Scientists returned into the city from the ruins measured the force that had been necessary to shift movable gravestones in the cemeteries, to knock over twenty-two of the forty-seven railroad cars in the yards at Hiroshima station, to lift and move the concrete road-way on one of the bridges, and to perform other noteworthy acts of strength, and concluded that the pressure caused by the explosion varied from 5.5 to 8.0 tons per square yard.

Others found that iron, of which the melting point is 2,800° C., had fused in greater quantities than three hundred and eighty yards from the center; that telephone poles of Cryptomeria japonica, whose carbonization temperature is 340° C., had been charred at forty-four hundred yards from the center; and that the surface of gray clay tiles of the type used in Hiroshima, whose melting point is 1,500° C., had dissolved at six hundred yards; and, after examining other buildings, they concluded that the bomb's heat on the ground at the center must have been 4,000° C.

And from further measurements of radiation, which involved, among other things, the scraping up of fission fragments from roof trusses and drainpipes as far away as the suburb of Takano, thirty-three hundred yards from the center, they learned some far more important facts about the nature of the bomb.

General Masaki, the headquarters systematically combed all mentions of the bomb in Japanese scientific publications, but soon the fruit of his search was a list of names of scientists, doctors, chemists, journalists, professors, and, as he doubt, the statisticians and military men who were still in circulation.

Long before the American public had been told most of the scientists and jobs of non-officials in Japan involved in the activities of Japanese nuclear physicists—that a uranium bomb had exploded at Hiroshima and a more powerful one, of plutonium, at Nagasaki.

They also knew that theoretically one ten times as powerful as twenty could be developed. The Japanese scientists thought they knew the exact height at which the bomb at Hiroshima was exploded and the approximate weight of the warhead used.

They estimated that even with the primitive bomb used at Hiroshima, it would require a ton of concrete fifty inches thick to protect a human being entirely from radiation sickness. The scientists had these and other details which remained subject to security in the United States printed and mimeographed and bound into little books.

The Americans knew of the existence of these, but tracing them and seeing that they did not fall into the wrong hands would have obliged the occupying authorities to set up, for the one purpose alone, an enormous police system in Japan. Altogether, the Japanese scientists were somewhat amazed at the efforts of their colleagues to keep security on atomic fission.

Late in February, 1946, a friend of Miss Sasaki's called on Father Kleinsorge and asked him to visit her in the hospital. She had been growing more and more depressed and morose; she seemed little interested in life.

Father Kleinsorge went to see her several times. On his first visit, he kept the conversation general, formal, and yet vaguely sympathetic; and did not mention religion.

Miss Sasaki herself brought it up the second time he dropped by on her. Evidently she had had some talks with a Catholic.

She asked bluntly, "If your God is so good and kind, how can he let people suffer like this?" She made a gesture which took her hand down and down. Her despondency was deep. She knew the world always be a struggle. Her father never came to see her. There was nothing for her to do except read and look out from her house on a hillside in Koi, across the ruins of the city where her parents and brother died. She was nervous, and any sudden noise made her jump. Her hands quickly went to her face. Her face still wore the shadow of her husband and that, as if to emphasize it.

It took six months for the Red Cross Hospital, and even longer for Dr. Sasaki, to get back to normal. Until the city restored a real electric power, the hospital had to dispense with the aid of a Japanese Army generator in its back yard.

Operating tables, X-ray machines, dentist chairs, everything complicated and essential came in a little of charity from other cities.

In Japan, care is important even to the smallest, and long before the Red Cross Hospital was back to par on basic medical equipment, the directors put up a new building, which they called the "new hospital" because the handsome building in Hiroshima—built from the street.

For the first few months, Dr. Sasaki was the only surgeon in the staff and he almost never left the building; thus, gradually, he began to take "ground" in his own life again.

He got married to Miss Sasaki, and she was a very good cook. They had a son, who was named after his father.

what she had learned from her father. The next night she had a dream in which the two other children, a girl and a boy, were with her, and she was talking to them, for want of anything else to do.

They wanted to study to be mechanics, like his father. One of them was high school senior. Mrs. Nakamura's mother was gone. She could count on no one to get her out of the house. She had several expensive dresses, but during the war, one had been stolen, she had given one to a sister who had been bombed out in Fukuoka, she had lost a couple in the Hiroshima bombing, and now she had her last one.

It brought only a hundred yen, which did not last long. In June, she went to Father Kleinsorge for advice about how to get along, and in early August, she was still considering the two alternatives he suggested—taking work as a domestic for one of the Allied occupying forces, or borrowing from her relatives enough money, about five hundred yen, or a bit more than thirty dollars, to start her own rusty sewing machine and accept the work of a seamstress.

When Mr. Tanimoto returned from Shikoku, he dropped a hint but never over the road; the lady thought it was a bad omen.

The roof still leaked, but he conducted services in the dining living room. He began thinking about raising money to restore his church in the city.

He became quite friendly with Father Kleinsorge and saw the Jesuit often. He carried them their Church's wealth; they seemed to be able to do anything they wanted, and he had no energy, and that was not what he had.

The Society of Jesus had been the first institution to build a relatively permanent shelter in the ruins of Hiroshima. That had been while Father Kleinsorge was in the hospital.

As soon as he got back, he began living in his shack, and he had another son, Father Kleinsorge, who had been in the hospital.

They put two together, and so on, and made a pretty chapel of them; they ate in the third. When materials were available, they commissioned a contractor to build a three-story mission house exactly like the one that had been destroyed in the fire.

In the meantime, carpenters and laborers, grouped together, shined beams, whitened corners of wooden pane and bored holes for them, until all the parts for the house were in a neat pile; then, on the 20th, they put the whole thing together, like an Oriental puzzle, without any nails at all.

Father Kleinsorge was finding it hard, as Dr. Fujii had suggested he would, to be contented and to take his life. He had not even a ray of hope to call on Japanese Catholics and prospective converts. As the months went by, he grew more and more tired.

In June, he read an article in the Hiroshima Chronicle warning survivors against working too hard, but what could he do? By July, he was worn out, and early in August, almost exactly on the anniversary of the bombing, he went back to the Catholic International Hospital in Tokyo, for a month's rest.

Whether or not Father Kleinsorge's answers to Miss Sasaki's questions about life were final and absolute truths, she seemed quick to draw physical strength from them. Dr. Sasaki noticed it and congratulated Father Kleinsorge.

By April 15th, her temperature and white count were normal and the infection in the wound was beginning to clear up. On the 17th, she was almost as well as she could be.

For the first time she jacked along a corridor in crutches.

Five days later, the wound had begun to heal, and in the last day of the month she was discharged.

During the early summer, she prepared herself for conversion to Catholicism. In that period she had her hair cut and her despondency was deep. She knew the world always be a struggle. Her father never came to see her. There was nothing for her to do except read and look out from her house on a hillside in Koi, across the ruins of the city where her parents and brother died. She was nervous, and any sudden noise made her jump. Her hands quickly went to her face. Her face still wore the shadow of her husband and that, as if to emphasize it.

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