

**SORANA
GEORGESCU-GORJAN**

*The
wonderful
story
of the
endless
column*



THE PUBLISHING HOUSE
OF THE
ROMANIAN CULTURAL FOUNDATION



**SORANA
GEORGESCU-GORJAN**

*The
wonderful
story
of the
endless
column*



SORANA GEORGESCU-GORJAN

*The wonderful
story
of the endless column*



THE PUBLISHING HOUSE OF THE
ROMANIAN CULTURAL FOUNDATION

Bucharest, 1995
ROMANIA

Cover and Design
VAL MUNTEANU

© 1995 by Sorana Georgescu-Gorjan

All rights reserved. No photographs may be reproduced without
the written permission of the author.

ISBN 973-9155-93-6

*To the memory of my father,
Ștefan Georgescu-Gorjan, author
of the technical conception of the Endless Column*

In the “Șerban Vodă” Cemetery of Bucharest, an armless bronze woman, kneeling over a black marble slab, seems to silently implore God’s mercy for the departed. Not far from this replica of the famous Brancusian *Prayer*, there stands a metal cross, bearing the names of two men whose life-paths felicitously crossed that of the great sculptor: Ion and Ștefan Georgescu-Gorjan. Their names cannot be separated from the wonderful story of the *Endless Column*.



The story begins in 1893, in the town of Craiova, in Madona Dudu Street¹.

Here, at No. 19, there stood Zamfirescu’s pub and grocery and — two buildings away — a draper’s shop, “The Coloured Star”, owned by Ghiță Ionescu.

Costache Brâncuși, a 17-year-old lad from Hobița, Gorj County, was working as a shop-assistant in Zamfirescu’s store. He

¹ The name of the street refers to “The Holy Virgin of the Mulberry Tree”, a miracle-working icon found in a mulberry tree, in a place where a church was raised.

was less interested in selling fruit than in using the dealboards of the crates to carve soap boxes, brush holders or tower racks for his friends.

One of those friends was Ion Georgescu-Gorjan, employed in the nearby draper's shop. They found out they were both from Gorj and had a great deal in common: they were both orphans, had left their neighbouring native villages at the age of ten and had been trying hard to improve their social standing ever since. Ion was seven years older and had already reached the position of senior salesman. He offered Costache his protection and invited him to share the room of his younger brother, Gogu. Brâncuși stayed with the Gorjan brothers at No. 14, C.A. Rosetti Street, until August 1895, when he became a boarder at a trade school.

Ion was a self-taught man, but he greatly appreciated education and desired that both his brother and his younger friend should acquire higher learning. Thanks to him, Gogu was able to study in Freiberg (Germany), to become an engineer.

Ion Zamfirescu, Ghiță Ionescu, Ion Georgescu-Gorjan and some others were aware of the unusual talent of the Hobîța lad, who had succeeded in making a violin out of a crate. They assisted him — both morally and materially — to get enrolled at the Craiova School of Arts and Crafts and later to join the School of Fine Arts in Bucharest.

Brâncuși did not disappoint them. He graduated “with honours” from the Craiova school in 1898 and successfully completed his studies at the Bucharest School of Fine Arts in September 1902. During the autumn of 1902, Brâncuși stayed for a while on the first floor of the building at No. 23, Madona Dudu Street, in the flat of his old friend, Ion, whom he used to call “Godfather”.

Desirous to show his gratitude, Brâncuși did Gorjan's portrait from nature, with the help of calipers. It is the earliest portrait

extant, done by Brâncuși from life. A contemporaneous photograph of the sitter reveals the sculptor's efforts in the service of truthfulness.

According to Barbu Brezianu, "This portrait is of rare workmanship, most accurately done and showing peculiar refinement and elegance."² Sidney Geist considers that "it holds the attention by the gentlest of means — quietness, self-containment, frankness and a grace of drawing and adjustment."³



In 1904, Brancusi left his country. Ion Georgescu-Gorjan got married. Their friendship lasted through the years. Brancusi kept sending postcards to his "Godfather". Whenever he visited Romania, he would call on the Gorjan family, pleased to see that the plaster portrait he had done held a place of honour in their house.

On September 11, 1905, the first born to the Gorjans was a son. Young Ștefan never got tired of listening to his father's tales about the wonderful lad from Hobîța. He admired the portrait so true to life and often toyed with the colourful postcards covered by exotic stamps sent by the sculptor. Brancusi's visits in 1914 and 1922 made a deep impression on him and he was enraptured by his travel accounts and stories about art and artists.

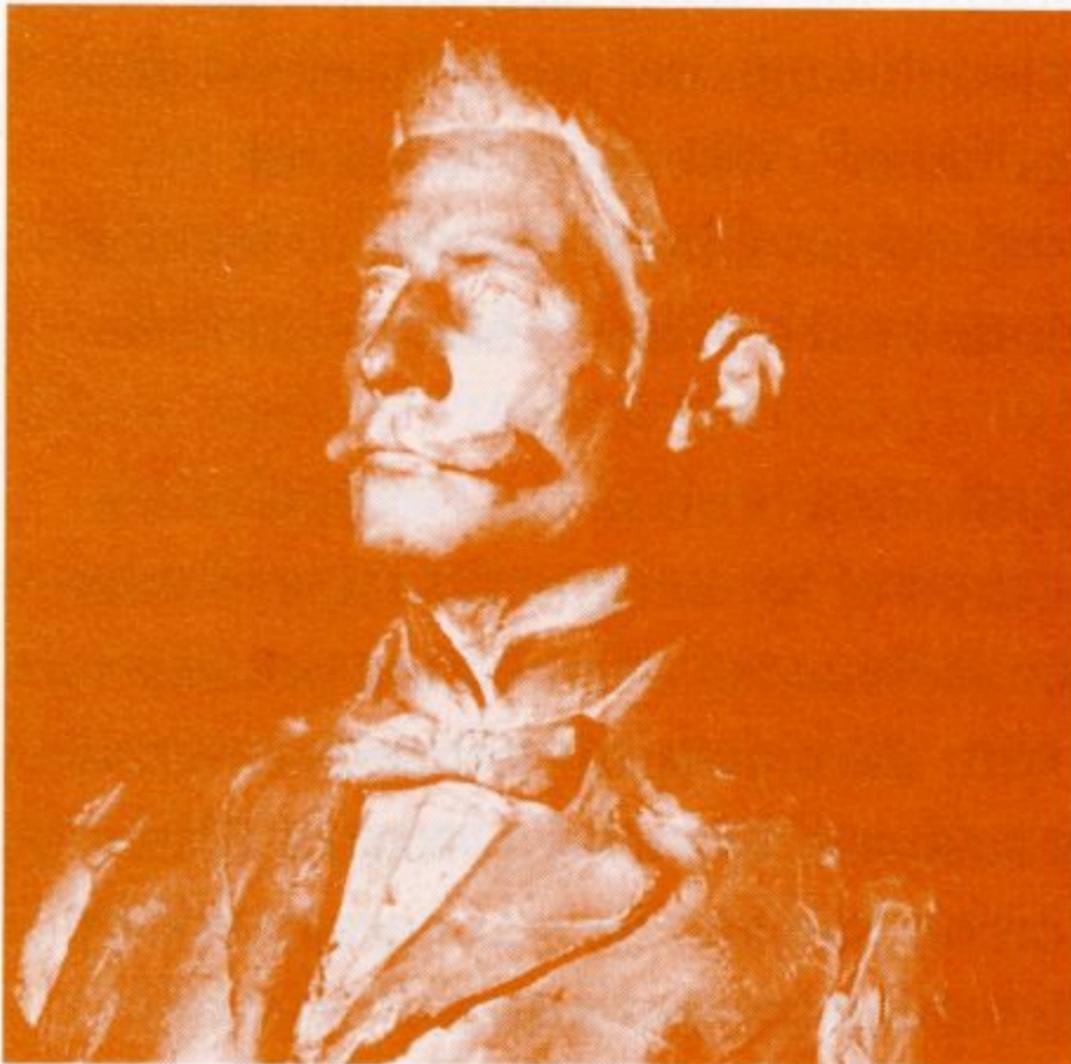
Ștefan found an incentive in Brancusi's example and decided to excel at school. He became proficient in mathematics and acquired a thorough command of foreign languages — German, French, English, Italian and Spanish.

² Barbu Brezianu, *Brancusi in Romania*, Ed. Academiei, Bucharest, 1976, p. 65.

³ Sidney Geist, *Brancusi — A Study of the Sculpture*, Grossman Publishers, New York, 1968, p. 15.

In 1923 he graduated with honours from the “Carol I” High School of Craiova and in 1928 he took his engineer’s diploma from the Polytechnical School of Bucharest. He also attended courses in philosophy, history, literature and the arts and was a constant visitor of art galleries and museums.

In 1929, after a 6-month instruction period in the Siemens-Schuckert Works in Vienna, Ștefan Georgescu-Gorjan started working at the Central Workshops of the “Petroșani” Society. His command of foreign languages and his professional proficiency recommended him for various assignments abroad to commission high-performance equipment and to contact foreign partners.



Plaster portrait
of Ion Georgescu-Gorjan

Travels to Austria, Italy, France, Germany, Holland, Belgium, as well as to Egypt, Syria and Algeria, made him acquire a broad world outlook, increased his professional skill and also extended his knowledge of art and culture. He visited monuments of art and history and bought a great many art catalogues and books.

In Paul Fierens’ *Sculpteurs d’aujourd’hui* (1933) he admired a photograph of Brancusi’s studio in which there stood three *Endless*

Columns. He was pleased to read that “La sculpture de Brancusi est au-delà de la sculpture, au-delà des normes habituelles du beau et du vrai.”⁴

It angered him to read in the 1929 *Encyclopaedia Britannica* that Brancusi’s “Bird in Space” was “a simple form so subjective that it has no aesthetic meaning except to the artist” and that “Mlle Pogany” was “a portrait which seems childlike in its simplicity.”

He was eager to make his own opinion and so, on the occasion of his first professional assignment to Paris, in December 1934, he decided to visit Brancusi in his studio at 11, Impasse Ronsin.

The sculptor extended a heartfelt welcome to his old friend’s son and gave him a tour of his house and studio: the peasant furniture carved by himself, the corner with the craftman’s tools, the bed on a suspended platform, the round stone tables, the hearth, the gramophone. The young man was awed by the contact with Brancusi’s works, sheltered by his studio in a strange universe of shapes carved with love and patience.

On December 26, in a postcard sent to his parents, Ștefan jotted down a post-scriptum: “I’ve seen Brancusi and we’ve talked a lot. He is a true artist, a genius!” The 29-year-old engineer was aware of the artist’s genius long before most art critics!

Ștefan was invited by Brancusi to come again on January 7, to celebrate together the name day of Ion Georgescu-Gorjan.

From 10 o’clock in the morning till late at night, the young man spent unforgettable hours, breathlessly listening to the artist’s opinions about Michelangelo and Rodin, as well as to his interpretations of his wonderful creations.

⁴ Brancusi’s sculpture is beyond sculpture, beyond the usual norms of beauty and truth.

The oakwood versions of the *Endless Column*, which revealed the artist's ceaseless attempts at reaching perfection, overwhelmed him. Those columns were altogether different from the classical ones, since they had neither base nor capital, as they had "neither beginning nor end."

An endless column had a number of full elements or modules. Each element was made up of two truncated pyramids joined by their large square bases. The number of elements varied, but all columns had a slightly elongated half-element at the base and all were topped by a half-element.

The *Endless Column* theme had always obsessed Brancusi, who placed some of his works on bases made up of the elements of such a column.

The first oakwood version was carved in 1918. It had three full elements and two half-elements and was 2.03 meters high. In 1920 he carved a 6-element column and a 9-element one (4.21 and 5.12 meters high, respectively). Also in 1920 he erected a 9-element wooden column, 7.24 meters high, in Edward Steichen's garden of Voulangis. A 4-element plaster column, 6.03 m high, was cast in 1930.



The young engineer and the sculptor talked a lot about art. Ștefan mentioned his visits to museums and listened respectfully to Brancusi's opinions. He also spoke about his activity in the Petroșani Central Workshops, where he was head of the designing and foundry departments, as well as of several laboratories. He mentioned his endeavours to help the young Gorj workers to better their condition in the Mining and Mechanical Foremen School, where he delivered lectures and worked out technical handbooks. To help them acquire a broader world outlook, he

had even initiated an Aero-Club — a gliding and planemodel making school.

Then Brancusi asked him whether he could help him achieve his long cherished dream: an *Endless Column* of great size made of metal. He desired the *Column* to spring stem-like from the earth soaring towards infinity.

Ștefan suggested a technical solution: To fix the base of a square steel structure in a massive concrete foundation and to “string” over the steel core giant hollow “beads”, representing the repeated elements.

Brancusi agreed and the young engineer offered to assist him with the construction of the metal monument, which could be carried out in the Petroșani Workshops.

The sculptor presented Gorjan with a fine catalogue of the 1926 “Brancusi” exhibition at the Brummer Gallery of New York and jotted down:

“À Ștefan Georgescu-Gorjan, souvenir de Paris et disque exotique, 7 janvier 1935.”

January 7, 1935 is, therefore, the birth date of the technical conception of the large-size *Column*.



Brancusi had always wished to do a public work for his country, but his ambition had always been frustrated. A 1913 project for a monument to the great Romanian mathematician and sociologist Spiru Haret was discarded by the officialdom. A 1923 initiative to erect a memorial to the heroes of his native commune failed. The same happened to a 1930 project for an *Endless Column* in Bucharest, to a 1931 project for a monument to playwright Ion Luca Caragiale in Ploiești, and to a memorial to the poet Octavian Goga at Ciucea. Neither did the projected Temple at Indore (1938) nor

the colossal columns in New York (1926) or Chicago (1955) become a reality.

The only monumental works by Brancusi which ever came into being stand in his native Gorj County, at Târgu-Jiu. This may be accounted for by a complex of favourable circumstances.

In 1934, Gheorghe Tătărescu was appointed prime-minister of the Liberal Cabinet. His wife, Aretie, was ^{fond of} born in Gorj county and presided over the National League of Gorj Women. They decided to subsidize the erection of a memorial to the heroes fallen in 1916 in defense of their native town, Târgu-Jiu. Aretie Tătărescu followed sculptor Milița Pătrașcu's advice⁵ and invited an artist of world renown and Romanian descent to erect that memorial: Constantin Brancusi.

Brancusi was considering that proposal when the young engineer called on him. After their talk, feeling that his friend's son could be trusted, that he understood his artistic requirements and was able to carry out the technical execution of the work, the sculptor accepted the commission and wrote to Milița Pătrașcu on February 1935:

“Now all the things begun so long ago approach completion, and I am like a workman's apprentice on the eve of getting his papers. So the proposal could not fall at a better time.”

The Târgu-Jiu memorial was to include an *Endless Column*, among other things. The premier's wife made use of all her influence to get the authorities' support and to find sponsors for the project. The board of directors of the “Petroșani” Society — headed by Ion Bujoiu, a prominent member of the Liberal Party — agreed to support the cost of the execution of the *Endless Column* (about 2.5 million lei). At Brancusi's request, engineer Ștefan Georgescu-Gorjan was to be in charge

⁵ Milița Pătrașcu had studied with Brancusi between 1919 and 1923.

of the whole project (execution of the metal structure, casting and machining of the elements, assembly and mounting). The engineer was given free scope to select the best possible team.⁶

In December 1936 and May 1937, in Paris, the artist and the engineer discussed the choice of the material to be used for the elements. Brancusi selected cast iron which he thought most resistant and decided to hide its dull colour by a coat of shining brass.

At the end of July 1937, Brancusi invited the young engineer to Târgu-Jiu, to show him the site he had selected for the *Column*. It was a plot of land bordered by squatting houses and covered by hay stacks. The town market was usually held there, but Brancusi would call it "The Hay Market." Gorjan took a photo of the place and had the negative developed and copied.

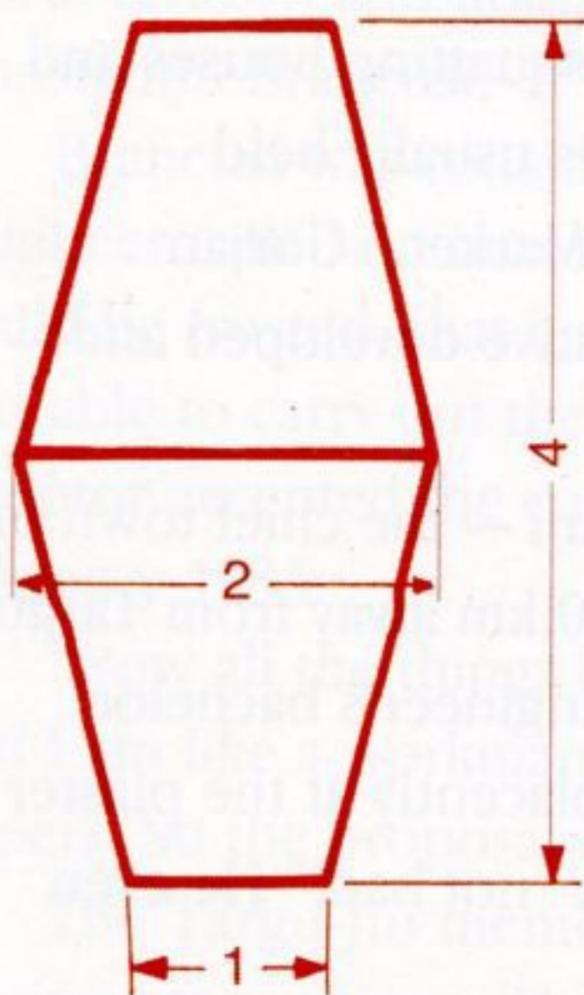
On August 1, Brancusi went to Petroșani — the chief town of the mining district of the Jiu Valey, some 60 km away from Târgu-Jiu — and became guest of honour in the engineer's bachelor house, at 2, Cloșca Street. He looked complacently at the plaster bust he had done in his youth and found it "not bad!" He even

⁶ The engineer's most trustworthy assistants were: eng. Nicolae Hasnaș — his right hand man —, designer Gavrilă Șomlo, model-carpenter Carol Flisek, foundry foremen Szabo Emeric and Gheorghe Atanasiu, metal structure foreman Ion Romoșan, assembling fitter Francisc Hering and first specialist in welding Victor Borodi. The foundation and scaffolding were in the charge of eng. Glöckner and foremen Victor and Augustin Perini. Together with teams of excellent hard-working specialists they completed the project in 3 months.

authorized the young man, who now owned the bust, to cast it in bronze.⁷

When the snapshot of the “Hay Market” was brought from the photographer, Brancusi took a fountain-pen and sketched the outline of a 12-element *Column* surrounded by lawn, a circular path and radial walks, as well as a few poplars.

During the first half of August 1937, sleepless days and nights were devoted to endless discussions and attempts to reconcile the sculptor’s artistic vision to the range of technical possibilities and to the financial limitations.



It was essential to find the dimensions which could meet Brancusi’s aesthetic requirements expressed in the formula of plastic harmony — the ratio of 1: 2 : 4, i.e. the total height of an element should be four times the side of the narrow base and twice that of the central width. Account had to be taken of the strength of the supporting steel core and of the risk of bending.

The ideal dimensions which actually satisfied the artist were: 450 mm for

⁷ Various circumstances prevented the engineer from doing so. The plaster portrait of Ion Georgescu-Gorjan was displayed in 1956 in the Art Museum of the Romanian People’s Republic and in 1970 in the Art Museum of the Socialist Republic of Romania. It was owned by Ion Georgescu-Gorjan between 1902 and 1935. He presented it to his son, Ștefan, who owned it from 1935 to 1968, when he sold it to the Art Museum. As the Museum preserved it in a box with shavings, it escaped destruction during the 1977 earthquake. In Gorjan’s house it had stood on a bookcase which toppled down during the earthquake.

the narrow base, 900 mm for the maximum central width and 1800 mm for the height.

Since all Brancusi's *Endless Columns* had a number of full elements multiple of 3, the selected "slenderness formula" was "1/2+15+1/2", that is a column composed of 15 full elements topped by a half element and based on another half element, prolonged by a short square columnar element below and lying on a low molding. The total height was 29.35 meters.

In mid-August, the model-carpenters of the Central Workshops made a rough lime-wood model observing the selected dimensions. The faces of the model had bulging planes which were patiently carved by Brancusi's chipaxe for days on end, till he got an almost imperceptible curve.

In the meantime, the designing team of the Petroșani Central Workshops, headed by engineer Gorjan, completed the design for the steel core of the Column.

The almost 30-meter-long supporting structure could not be transported on the winding roads of the Jiu defile from Petroșani to Târgu-Jiu. Therefore, it was divided into three sections of 8.93, 10 and 9.4 meters, respectively.

At the end of August, Brancusi had to leave Petroșani and on September 2 he took the train for Paris.

The young engineer was faced with the whole responsibility of the operation. He ordered high-quality rolled steel shapes and plates from Reșița steel-mill, which they supplied in record time (also thanks to the premier's intercession). Throughout September and October the steel core was manufactured in the Metal Structures Department. The elements were cast and machined to get plane parallel surfaces, liable to be joined by mere superposition.

The core was assembled with bolts in the workshop and a trial mounting was performed in the great hall of the Metal Structures Department.

Each cast element was “threaded” on the core ensuring their perfect joining. Their succession was marked by punched numbers, to permit an accurate mounting *in situ*.

Special heed was paid to protect the steel core against corrosion. The whole inner structure was covered with two coats of red lead in the workshop. A third layer was added later, on the building site.



Ștefan Georgescu-Gorjan
in 1937

In the first half of October, engineer Gorjan supervised the pouring of the concrete foundation at Târgu-Jiu. A 35-meter high scaffold was erected. A steel pyramid base made of crosswise gussets was fixed in the foundation, three meters deep, and the bottommost core section was welded to it.

The cast elements were brought from Petroșani to Târgu-Jiu by truck, carefully covered with tarpaulins. They were gripped to the hook of the pulley block with a special device.

In early November, Brancusi arrived in Târgu-Jiu to watch the threading down of the first elements over the bottommost third of the steel core. He may be seen in two photographs taken by engineer Gorjan. As the engineer was using the camera himself, he did not appear in any of the 20 snapshots he took.

Brancusi left Târgu-Jiu on November 7. Between 8 and 15 November, the middle core section was hoisted with pulley blocks and jacks and then welded to the lower one. Elements IV to IX were threaded down, the last core section was welded and elements X to XV, as well as the topmost half-element, covered with a plate, were threaded over it.

Each element was blocked on the steel core by thin steel wedges, their horizontalness being checked with a water level.

The clearance of some millimeters between the steel core and the lower openings of the elements requested their accurate machining and adjustment but facilitated their perfect superposition and helped to provide the aspect of continuity of the Column.

The execution of the monument was over on November 15, 1937. The whole operation had lasted only three months.

Brancusi had entrusted the young engineer with all technical aspects of the work. He sent him two letters and a telegram, with a few indications. He especially desired that the metal covering be yellow (“il faut que la métalisation soit jaune”).

In 1938, between June 20 and July 25, the “Metalizarea” company of Bucharest carried out the metallization of the outer surfaces, which had been previously blasted with quartz sand to ensure perfect adherence. A special “gun” was used to spray the elements with zinc and then with molten brass.

The *Column* rose, golden and slender. In its thrust to the sky it seemed to link heaven and earth.

According to Sanda Miller, "This most extraordinary monument is a triumph of art and engineering alike", "strangely non-functional and yet the result of a combination of the artistic vision of the sculptor and the technical skill of the engineer."⁸

■

The monument was inaugurated in October 1938. Tătărescu was no longer prime-minister and festivities were simpler. Ștefan Georgescu-Gorjan was abroad at the time and did not meet the sculptor.

The war and the years of totalitarian rule kept them apart. Ștefan Georgescu-Gorjan, just as Gheorghe Tătărescu and Ion Bujoiu, became acquainted with the communist prisons. Constantin Brancusi was considered "persona non grata", the representative of "decadent art." In the early fifties, attempts were made to pull down the "decadent" monument, using a cable drawn by a tractor. The quality of the 1937 workmanship was then put to the test — the monument could not be moved and only its top underwent a certain deviation.

On March 16, 1957 Brancusi died in Paris. It was only after a while that the authorities of his native country began to acknowledge his genius. Books, albums, papers started being published. After 1964, Ștefan Georgescu-Gorjan contributed papers, lectures and interviews about his unique experience of cooperating with Brancusi in the erection of the *Endless Column*. He had preserved the set of 20 photographs, recording the construction of the monument and he conscientiously noted down

⁸ Sanda Miller, *Art and engineering*, lecture at the Design History Society,

all his recollections. He studied various aspects of Brancusi's *Endless Columns* and contributed some 30 papers on this topic.

A posthumous volume records all his research-work and experience.

The Gorjan archives boast two letters and a telegram from Brancusi, the autographed Brummer Catalogue, Brancusi's sketch of the Column, some of the Column plans, as well as an impressive correspondence between Ștefan Georgescu-Gorjan and Carola Giedion-Welcker, Edward Steichen, Sidney Geist, Florence Hetzler, Teja Bach, Siegfried Salzman, Marielle Tabart, Athena Tacha-Spear and others.

On September 21, 1979, Nicholas Pope, a young English sculptor, informed the engineer of a project to erect a replica of the Endless Column in the Serpentine Gallery of London:

"It would be made in fibre glass with a similar core structure as the original and would be the true colour."

Ștefan Georgescu-Gorjan answered: "A copy of the Column is a very difficult, if not impossible issue, as the genuine foundry pattern of the element of the Column got lost. It is impossible to reproduce mechanically the fine touches of the sculptor who carved and finished the wooden pattern of the element in 1937. As for myself, I am not for full-scale reproductions of the *Column*, as this monument is a unique one and must be admired in its own environment...".

Engineer Gorjan had always been concerned with the preservation of the *Endless Column*. In 1965-1966 and 1975-1976, he participated in the remetallization of the Column. In January 1985 he was happy to read the conclusions of a report concerning "A Study of the preservation condition of the Târgu-Jiu Endless Column", signed by specialists in Construction Research. The report stated that the 1937 construction had been excellently

performed, that it was well preserved and requested only protection measures against outer corrosion.

On March 5, 1985, Ștefan Georgescu-Gorjan passed away, conformed by the knowledge that his contribution to Brancusi's *opus magnum* had been beneficial.

It is the duty of living specialists to carry on the task of preserving that unique monument, which, according to Jean Arp, is Brancusi's self-portrait:

“Son portrait par lui-même: la colonne sans fin”...

**ȘTEFAN GEORGESCU-GORJAN'S
CONTRIBUTIONS TO THE KNOWLEDGE OF BRANCUSI'S WORKS**

- (1964a) *The Genesis of the Column without End*, Rev. Roum. Hist. Art, I, 2, p. 279-293, 9 fig.
- (1964b) *Biografia și perspectivele Coloanei Infinite* (The biography and prospects of the Endless Column), Ramuri, I, 5, Dec., p. 8-9, 8 fig.
- (1964c) *Cu privire la ansamblul statuar Brâncușian* (On the Brancusian statuary ensemble), Viața românească, XVII, 12, Dec., p. 153-144.
- (1965a) *Mărturii despre Brâncuși* (Memories on Brancusi), St. Cerc. Ist.Art. — Arta plastică, 12, 1, p. 65-74, 3 fig.
- (1965b) *Memoria locurilor. Modelul Coloanei Infinite. Mausoleul din Indor. Patinarea unui bust* (The memory of sites. The model of the endless Column. The Indore mausoleum. Giving patina to a bust), Ramuri, II, 3(8), Mar., p. 12, 13, 1 fig.
- (1965c) *Realizarea Coloanei infinite* (The erection of the Endless Column), Arta plastică, 2, 1965, p. 105-109, 9 fig.
- (1965d) Interview in *Popas la Târgu Jiu. Opinii, controverse, sugestii* (A halt at Târgu Jiu. Opinions, controversies, suggestions), Ramuri, 2, 6(11), p. 4-5.
- (1966) *Constructorii Coloanei infinite* (The constructors of the Endless Column), Contemporanul, 7(1010), Feb., p. 7, 1 fig.
- (1967a) *Constantin Brâncuși* in the Craiova Art Museum booklet, p. 19-21, 3 fig.
- (1967b) Interview in Paul Anghel's *Brâncuși la el acasă* (Brancusi at home), Scânteia, Oct. 21, p. 5.
- (1970) *Geometria coloanei infinite* (Geometry of the Endless Column), România literară, III, 6(69), Jan. 29, p. 23, 3 fig.
- (1972a) *Mărturii despre Brâncuși* (Memories on Brancusi), Lecture on Dec. 8 at the "Petöfi Sandor" Club, Bucharest.
- (1972b) Interview recorded in Paul Anghel's *Convorbiri culturale* (Cultural conversations), Ed. Eminescu, Bucharest, p. 37-39.
- (1973a) *Itinerar artistic la Târgu Jiu* (An art itinerary at Târgu Jiu), Lecture on Jan. 18, at the Touring Club of the 4th Sector, Bucharest.
- (1973b) *A short comment on the technical aspects of the size of Brancusi's Endless Column at Tg. Jiu*. Text sent to Sidney Geist (USA) on September 15.
- (1973c) *Calculations for a 400-meter high column*. Text sent to Sidney Geist (USA) on December 12.
- (1975) Interview recorded in the volume *Mărturii despre Brâncuși* (Memories on Brancusi), Târgu-Jiu, p. 25-35, 1 fig.
- 1976a) *Scurt comentariu asupra aspectelor tehnice ale mărimii "Coloanei Infinite" a lui Brâncuși din Târgu Jiu* (Brief commentary on the technical aspects of the size of Brancusi's Endless Column at Târgu Jiu). Communication at the "Constantin Brâncuși" Symposium, Târgu-Jiu, 15 Feb., published in the volume *Omagiu 100 Brâncuși* (Homage to Brancusi's centennial), Târgu-Jiu, p. 56-59.
- (1976b) Interview recorded in Romulus Rusan's *Brâncuși după Brâncuși* (Brancusi after Brancusi), România literară, IX, 8, Feb. 19, p. 12, 15.
- (1976c) *Les colonnes infinies de Brancusi. Chronologie et évolution*. Communication at the International Scientific Session "Brancusi in the Art of the 20th Century", Bucharest, September 15.
- (1976d) *The Mausoleum of Indore*. Text sent to Florence Hetzler (USA) on Nov. 12.
- (1977a) Letter to the editor included in *Noi documente Brâncuși* (New documents on Brancusi), Flacăra, XXVI, 3(1128), Jan. 20, p. 12.
- (1977b) *Brâncuși și coloanele sale* (Brancusi and his columns). Text delivered on Feb. 16 to the principal of the Industrial College no 9 of Craiova.
- (1977c) Interview recorded in Romulus Rusan's *O discuție la Masa Tăcerii* (A discussion at the Table of Silence). Ed. Eminescu, Bucharest, p. 182-186.
- (1977d) *O coloană de 60 metri?* (A 60-meter high column?), Ramuri, XIV, 3(153), Mar., p. 13, 1 fig.
- (1977e) *"Machetele" Coloanei de la Târgu Jiu* (The models of the Târgu Jiu Column), Arta, XXIV, 7, p. 33, 1 fig.
- (1977f) *Coloanele infinite ale lui Brâncuși* (Brancusi's Endless Columns), Arta, XXIV, 8, p. 18-20, 36, 3 fig.
- (1977g) *Structura modulară a monumentelor de la Târgu Jiu* (The modular structure of the Târgu Jiu monuments), Arta, XXIV, 10-11, p. 32-33, 5 fig.
- (1977h) Book review of "*Brancusi photographe*" by Marielle Tabart et Isabelle Monod-Fontaine, Paris, 1977, Fotografia, 120(78), Nov.-Dec., p. 187.
- (1978a) *Schița Coloanei Infinite, făcută de Brâncuși și montarea ei la Tg. Jiu* (The sketch of the Endless Column made by Brancusi and its erection at Tg. Jiu), Fotografia, 121, Jan-Feb., p. 3, 12 fig.
- (1978b) *Două fotografii confirmă datarea unui bust de Brâncuși* (Two photographs corroborate the dating of a bust by Brancusi), Fotografia, 122, Mar. Apr., p. 53-54, 3 fig.

- (1978c) *Contribuții inedite la cunoașterea unui proiect al lui Brâncuși — Templul din Indor* (Original contributions to the knowledge of a project of Brancusi's — The Temple of Indore), *Arta*, XXV, 3, p. 24-28, 4 fig.
- (1978d) *Brâncuși fotograf* (Brancusi as a photographer), book review, *Arta*, XXV, 4, p. 36, 4 fig.
- (1978e) TV interview in Aristide Buhoiu's "The invisible face of the masterpiece", Sunday 9 April.
- (1978f) *O coloană gigantică* (A gigantic column), *Arta*, XXV, 8-9, p. 58-59, 1 fig.
- (1978g) *Ansamblul monumental de la Târgu Jiu — 40 de ani de la inaugurare. Cronologia execuției lucrărilor* (The monumental complex of Târgu Jiu — Forty years since its inauguration. Chronology of the execution of the works), *Arta*, XXV, 10, p. 32-35, 5 fig.
- (1979a) *Brâncuși et ses colonnes infinies — Nouvelles contributions*, *Rev. Roum. Hist. Art., Sér. Beaux Arts*, XV, p. 89-104, 13 fig.
- (1979b) *Un proiect intermediar de Coloană infinită în arhiva Brâncuși de la Paris* (An intermediate design of the Endless Column in the Brancusi archives of Paris), *Ramuri*, 9(183), Sept., p. 16, 4 fig.
- (1979c) *Catalogul expoziției Brâncuși — Brummer Gallery* (The catalogue of the Brancusi exhibition at the Brummer Gallery), *Arta*, XXVI, 1, p. 20-23, 12 fig.
- (1979d) *Machetă sau joc de forme?* (Model or play upon forms?), *Arta*, XVI, 7, p. 16-17, 4 fig.
- (1979e) *Ovoidul (I) (The Ovoid-I)*, *Arta*, XX, p. 19-21, 10 fig.
- (1979f) *Ovoidul (II) (The Ovoid-II)*, *Arta*, XXVI, 10, p. 30-33, 13 fig.
- (1980a) *Scrisori de la Constantin Brâncuși* (Letters from Constantin Brâncuși), *Ramuri*, XXVI, 8(194), August, p. 13, 1 fig.
- (1980b) *Brâncuși și Craiova* (Brancusi and Craiova), Lecture at the Tourism History Circle, Tuesday 2 Sept., Bucharest.
- (1981) *Le mythe de l'oeuf cosmique et son influence sur l'oeuvre de Brancusi*, *Ethnologica*, p. 74-85, 182-183.
- (1982a) TV interview in Aristide Buhoiu's "The Brancusi Constellation", Sunday 31 January.
- (1982b) *Carola Giedion-Welcker, evocare* (Carola Giedion-Welcker, an obituary), *Arta*, XXIX, 7-8, p. 33, 1 fig.
- (1983a) *Brancusi's Endless Columns in Târgu Jiu*. Text sent to Florence Hetzler (USA) on Jan. 31, for the International Brancusi Society.
- (1983b) TV Interview in Alexandru Stark's "Photograms of real life; The Monument of Indore". Thursday July 14.
- (1984) Fragments of the volume *Am lucrat cu Brâncuși* (I've worked with Brancusi) were published in the Sunday Literary And Art Supplement of "Scânteia Tineretului (SLAST) as follows:
- (1984a) *Profesiune de credință. Vieți paralele* (Profession of faith. Parallel lives), *SLAST*, IV, 13(131), Mar. 25, p. 3, 1 fig.
- (1984b) *Vieți paralele (II) (Parallel lives-II)*, *SLAST*, IV, 14(132), Apr. 1, p. 10, 1 fig.
- (1984c) *Amintirile mele despre Brâncuși (I) (My recollections about Brancusi — I)*, *SLAST*, IV, 15(133), Apr. 8, p. 10, 4 fig.
- (1984d) *Amintirile mele despre Brâncuși (II) (My recollections about Brancusi — II)*, *SLAST*, IV, 16(134), Apr. 15, p. 10, 1 fig.
- (1984e) *Amintirile mele despre Brâncuși (III). Constructorii Coloanei Infinite (I) (My recollections about Brancusi (III). The constructors of the Endless Column (I)*, *SLAST*, IV, 17(135), Apr. 22, p. 3, 1 fig.
- (1984f) *Constructorii Coloanei Infinite (II). (The constructors of the Endless Column (II)*, *SLAST*, IV, 18(136), Apr. 29, p. 10.
- (1984g) *Constructorii Coloanei Infinite (III). Coloana de la Târgu Jiu (I) (The constructors of the Endless Column — III. The Târgu Jiu Column — I)*, *SLAST*, IV, 19(137), May 6, p. 10, 1 fig.
- (1984h) *Coloana de la Târgu Jiu (II) (The Târgu Jiu Column — II)*, *SLAST*, IV, 20(138), May 13, p. 10, 1 fig.
- (1984i) *Coloana de la Târgu Jiu (III) (The Târgu Jiu Column — III)*, *SLAST*, IV, 21(139), May 20, p. 10.
- (1984j) *Coloana de la Târgu Jiu (IV) (The Târgu Jiu Column — IV)*, *SLAST*, IV, 22(140), May 27, p. 10.
- (1984k) *O coloană gigantică (I) (A gigantic column — I)*, *SLAST*, IV, 24(142), June 10, p. 10, 1 fig.
- (1984l) *O coloană gigantică (II) (A gigantic column — II)*, *SLAST*, IV, 25(143), June 17, p. 10.
- (1984m) *O coloană de 60 metri înălțime, cu 29 elemente la Târgu-Jiu? (I) (A 60-meter high 29-element column at Târgu-Jiu? (I))*, *SLAST*, IV, 26(144), June 24, p. 10, 1 fig.
- (1984n) *O coloană de 60 metri înălțime, cu 29 elemente la Târgu-Jiu? (II) (A 60-meters high 29-element column at Târgu-Jiu? (II))*, *SLAST*, IV, 30(148), July 22, p. 10.
- (1984p) *Primii admiratori, primii detractori ai Coloanei* (The first admirers and the first disparagers of the Column) *SLAST*, IV, 31(149), July 29, p. 10, 1 fig.
- (1987) *Desenele abstracte ale lui Brâncuși* (Brancusi's abstract drawings), *Arta*, XXXIV, 6, p. 20-21, 4 fig.
- (1988) *Amintiri despre Brâncuși* (Recollections about Brancusi), Ed. Scrisul românesc, Craiova, 232 p., 39 fig., 7 facsimile copies.

THE "FILM" OF THE ERECTION OF THE *ENDLESS COLUMN*

1. The "Hay Market" in July 1937

The site selected by Brancusi for the erection of his *Endless Column* in Târgu-Jiu was photographed by engineer Ștefan Georgescu-Gorjan. It was referred to as the "Hay Market" because of its large hay stacks.

2. A Sketch of the "Endless Column"

On the snapshot of the "Hay Market" Brancusi sketched the outline of a 12-element *Column*, surrounded by lawn, a circular path and radial walks. A few poplars are also sketched.

3. The rough model of an element of the Endless Column

This rough lime-wood model was made by the model-carpenters of the Petroșani Central Workshops in mid-August 1937. Its bulging faces were patiently and lovingly carved by Brancusi himself for days on end, till he got an almost imperceptible curve, visible in the cast elements. The model carved by Brancusi no longer exists.

4. Trial mounting of the Column in the Metal Structures Workshop of the Petroșani Central Workshops

The cast elements are threaded like beads over the steel core with a square section. The square frame at the left will turn up as a molding around the base. The steel cross-trestle with 4 pairs of "fins" is visible.

5. Organization of the Column erection site

The building site is in full operation: concrete is being mixed and poured, gravel carried in horse- or ox-driven carts is unloaded, water is brought in a tank placed on an ox-driven cart. A locomobile prepares the heating steam. An electric engine is coupled with a belt by Petroșani mechanics. Warm water is to be used for concrete pouring as it is October and already cold.

6. The mounting crew unloads materials

The scaffolding and lower section of the steel core are seen in the background. The water tank stands close to the scaffolding. A truck with tools and materials is being unloaded. A water-proof tarpaulin is seen on the side of the track.

7. The mounting crew and the cast elements

The mounting crew is photographed by one of the mechanics near the cast iron elements brought from Petroșani. Foreman Francisc Hering stands on the left.

The square opening at the end of the hollow "beads" is clearly seen. In the background there stands a wooden portal with a hand-operated hoisting block, meant to unload the elements from the truck.

8. The scaffolding is erected

The scaffolding is being erected. The lower section of the steel core has been hoisted and secured to the embedded steel structure before the scaffold reaches its final height (35 meters).

9. The first core section is coated with anti-rust paint

Workers are pouring the last layer of concrete over the foundation. The upper part of the "fins" of the cross-trestle is welded to steel strips which support the steel frame that will underlie the lower half element of the *Column*.

The riveting of the "fins" is visible at the lower end of the structure. Welding seams are also visible.

Foreman Augustin Perini is leaning against the steel structure. Iosif Moldovan is painting it with red lead, suspended in a kind of "swing".

10. The lower half-element is being "threaded" down

The lower half-element, continued with a 54-cm vertical mass, is gripped to the hook of the hand-operated hoisting block with a special device, visible in the photo: a collarband bolted to the element, with four rings and two pairs of rigid rods. Foreman Francisc Hering is supervising it.

11. The gripping device is being unhooked

The lower half-element with its prismatic pedestal stands on a square steel frame. In the background there stands a truck from Petroșani.

12. The second element is being hoisted

Francisc Hering, the foreman of the mounting crew, is supervising the hoisting of the second full element, as he stands on the first platform of the scaffolding.

Constantin Brancusi (back view) goes to the scaffolding, to get a better view of the operation.

13. The second element is "threaded" down

Brancusi stands close to the scaffolding. A worker fills the joints between the lower half-element and the first half-element with a jointing paste. The photo was taken in early November.

14. Hoisting of the second section of the metal structure

The second core section is hoisted with pulley and jacks as the third full element has already been threaded down. Foreman Francisc Hering (back view) is supervising the process.

The upper end of the first core section shows fragments of the four angles with perforated holes. These match the holes made in the cover plates of the lower end of the second core section. The two sections are to be welded together by Victor Borodi, the best specialist of the Jiu Valley. A coat of red lead shall be spread on the second section as well.

15. The second core section is in an almost vertical position

16. The 8th element is threaded down

The scaffolding has reached its final height. The eighth full-element is being "threaded" down on the second core section. On a platform, two workmen are waiting to fasten it with wedges and to fill up the joints with jointing paste.

17. Hoisting of the last core section

After the ninth element was "threaded" down, the last core section was hoisted. This upper section had a different structure than the lower ones. Its angles are connected by welded gussets and only the lower portion is closed with plates. Ladders and intermediary platforms are clearly seen. The difference of structure is accounted for by the greater strength required by the lower sections, where the bending stress is greater.

18. Structure detail of the upper core section

19. The tenth element has been "threaded" down

The whole scaffolding is visible now. On the left, the photo shows the wooden portal with the hand-operated hoisting block, used to unload elements straight from the truck. Several cast elements may be seen close to the portal. The locomobile which supplies warm water stands close to the scaffolding.

20. All the 15 full elements have been "threaded" down

Only the upper half-element and its cover are still to be threaded. In a few hours, the whole operation will come to an end.

The mounting crew in their working clothes are photographed close to the monument.

21. Finis coronat opus!

The Petroșani assembly team, with Francisc Hering on the right and Augustin Perini on the left (near the policeman), are ready to go home, after having completed their work.

22. The first sight-seers...

The first admirers of the Column were the engineer's mother (Stanca Georgescu-Gorjan) and his aunt (Paraschiva Băleanu, in the foreground).

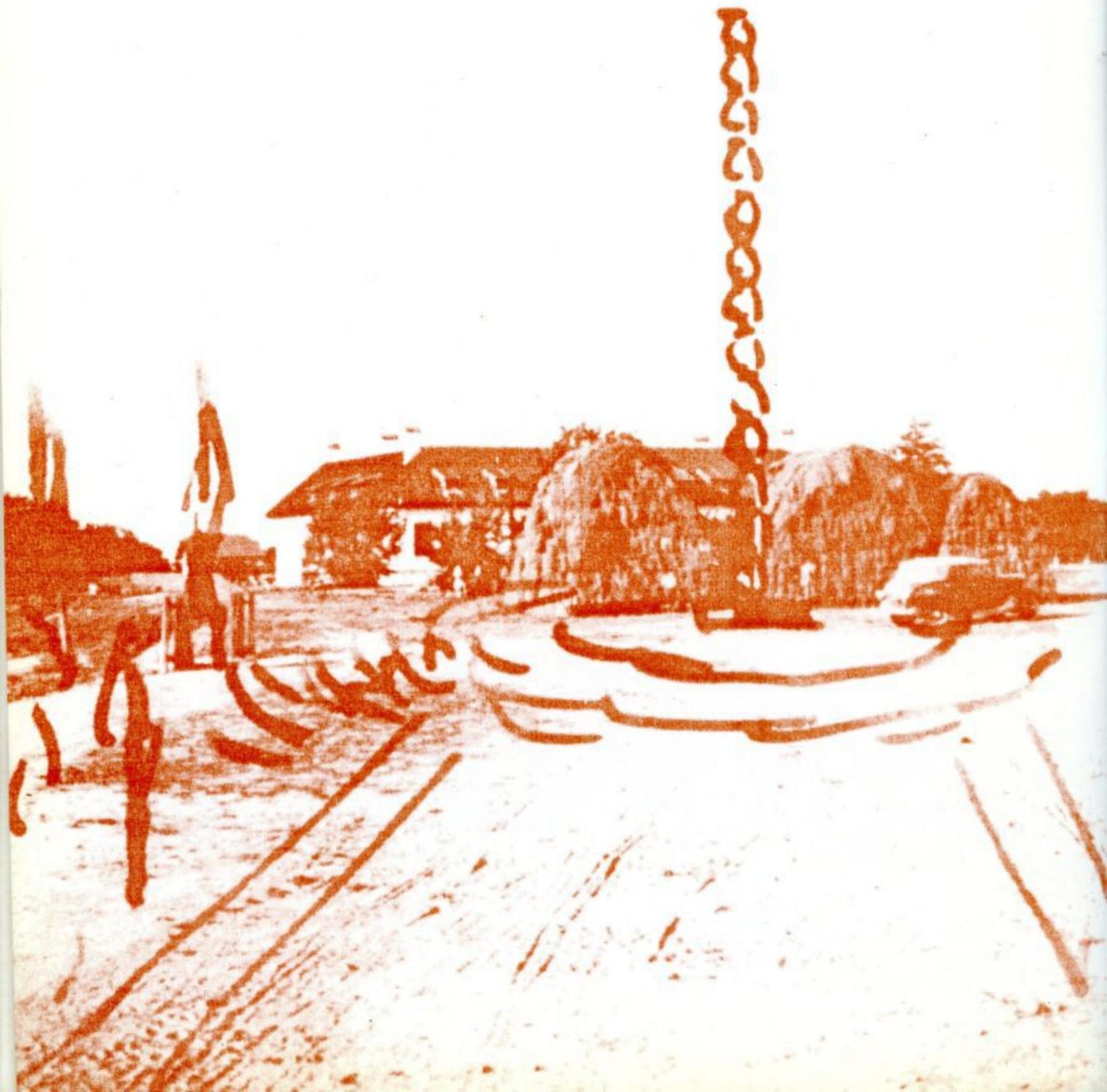
The perfect superposition of the elements can be seen. The scaffolding is preserved for the 1938 metallization.

23. The Endless Column is rising in the sun.

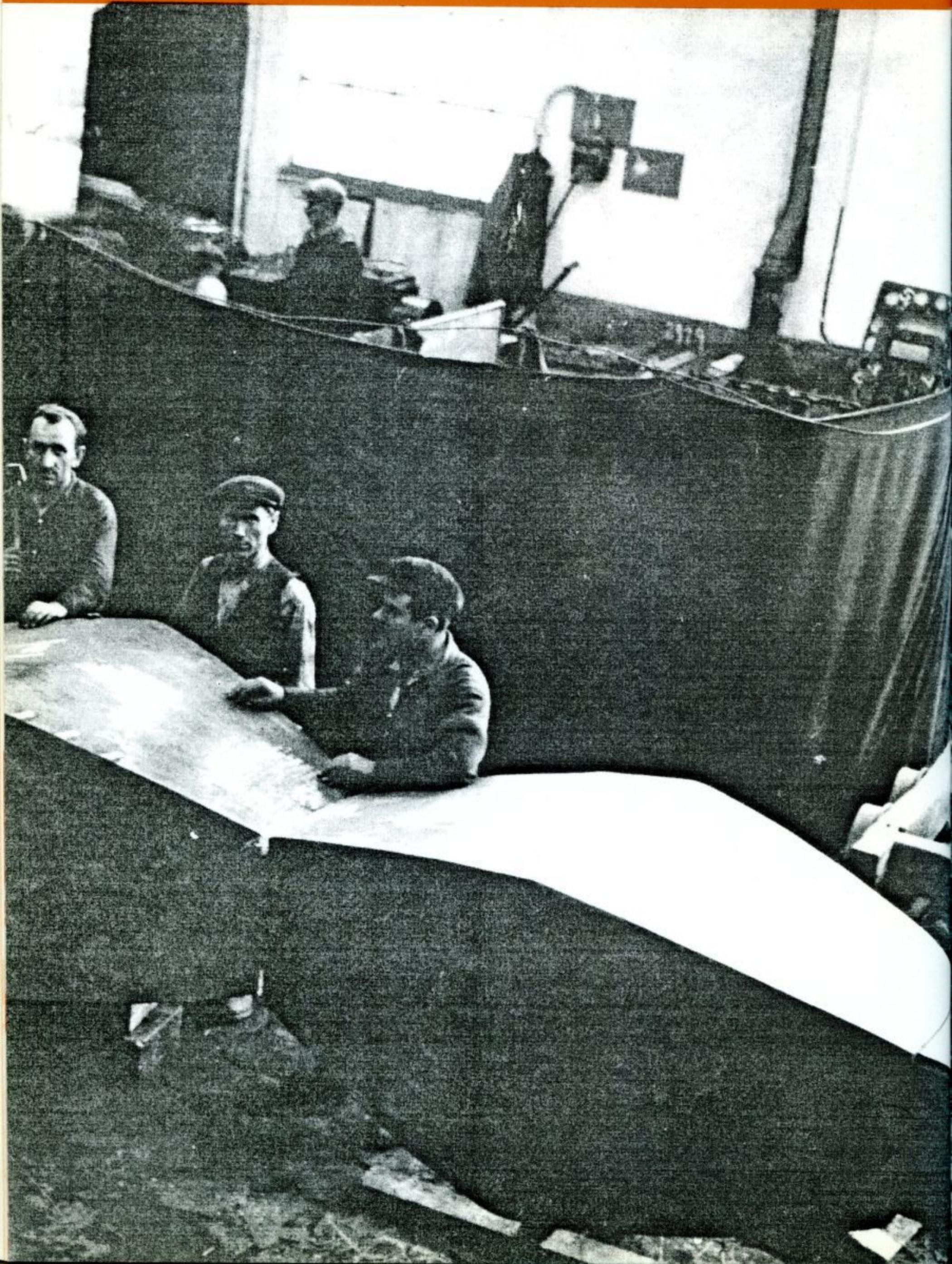
(Photo Sean Hudson, 1976)

THE "FILM" OF THE ERECTION
OF THE *ENDLESS COLUMN*

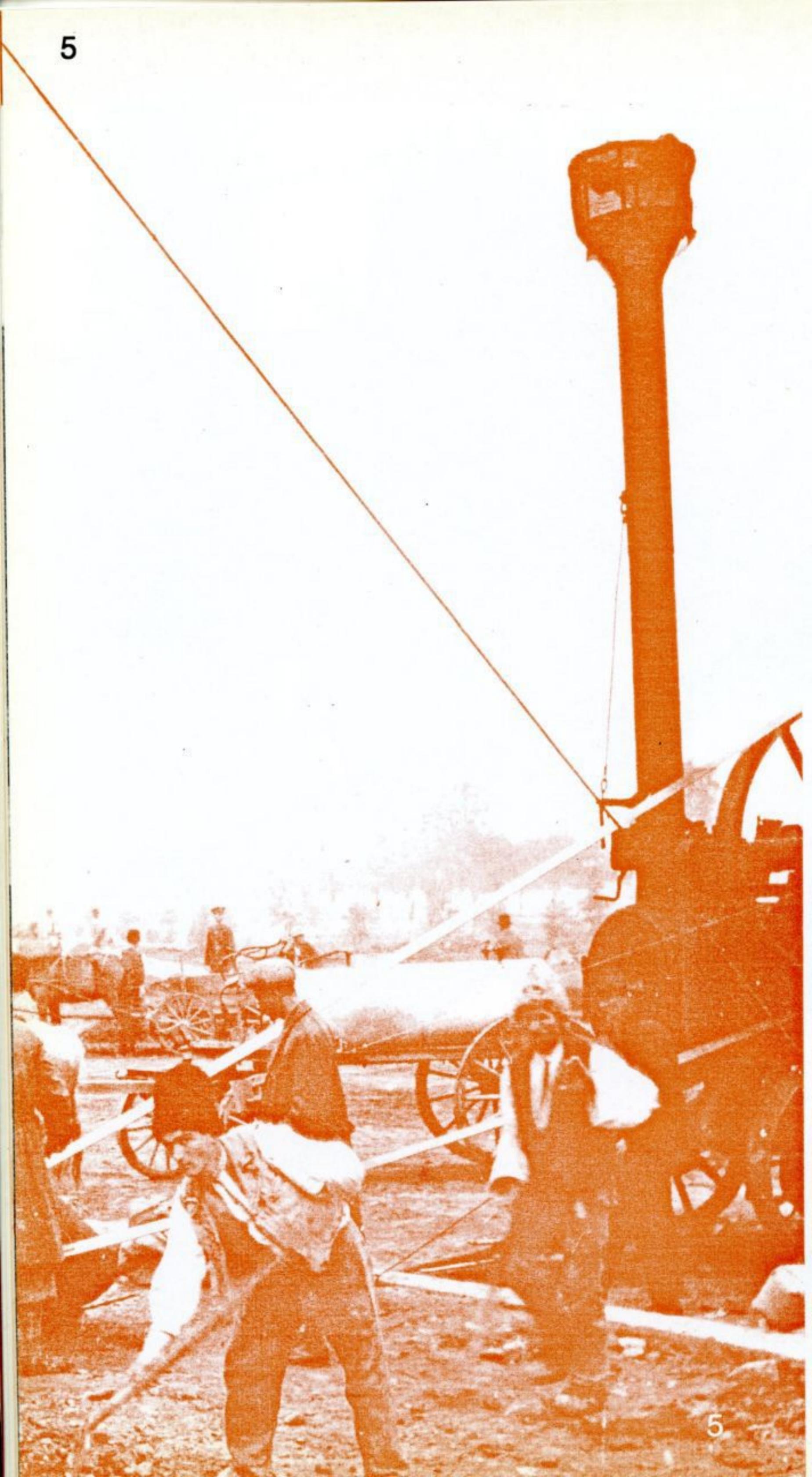








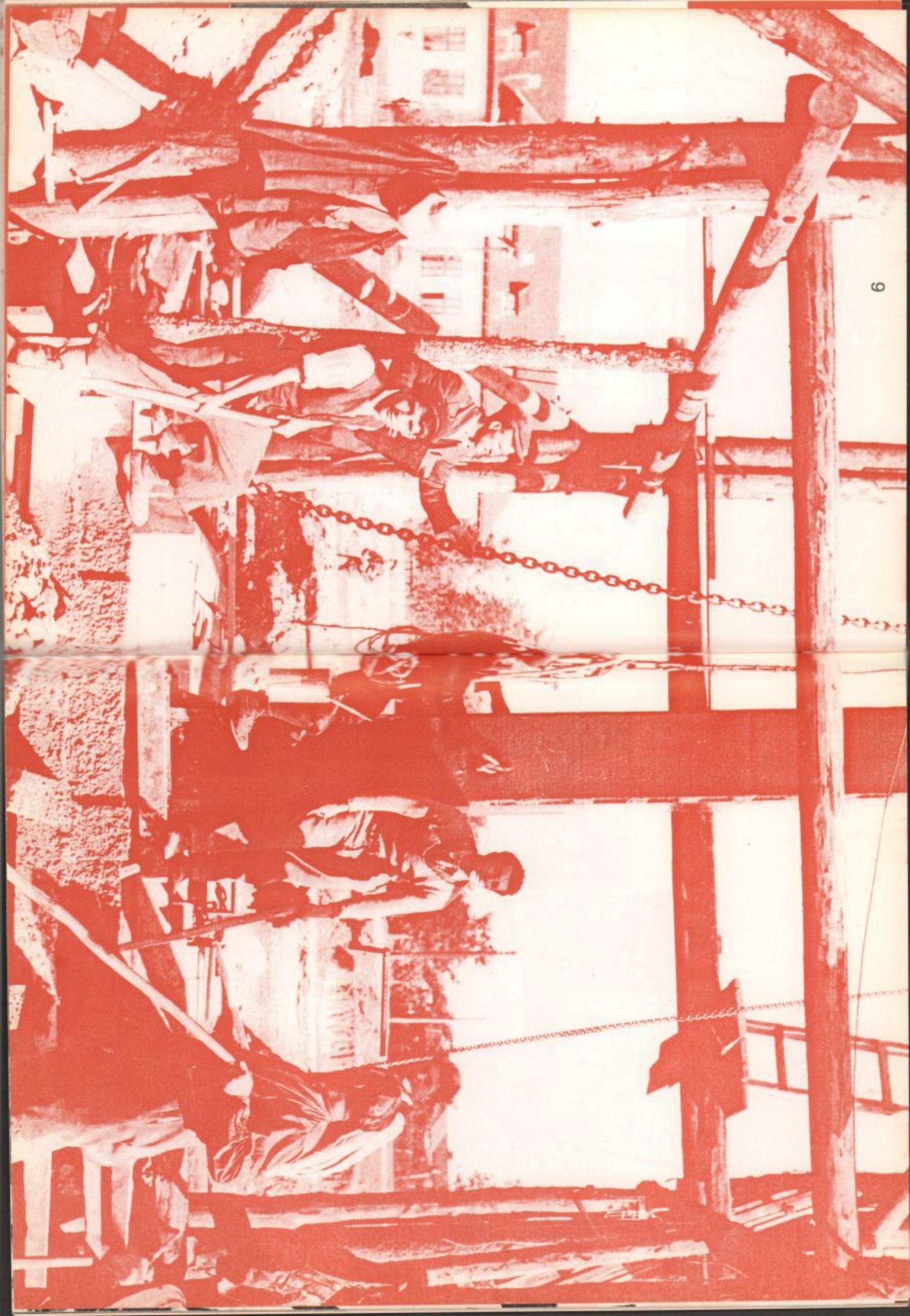


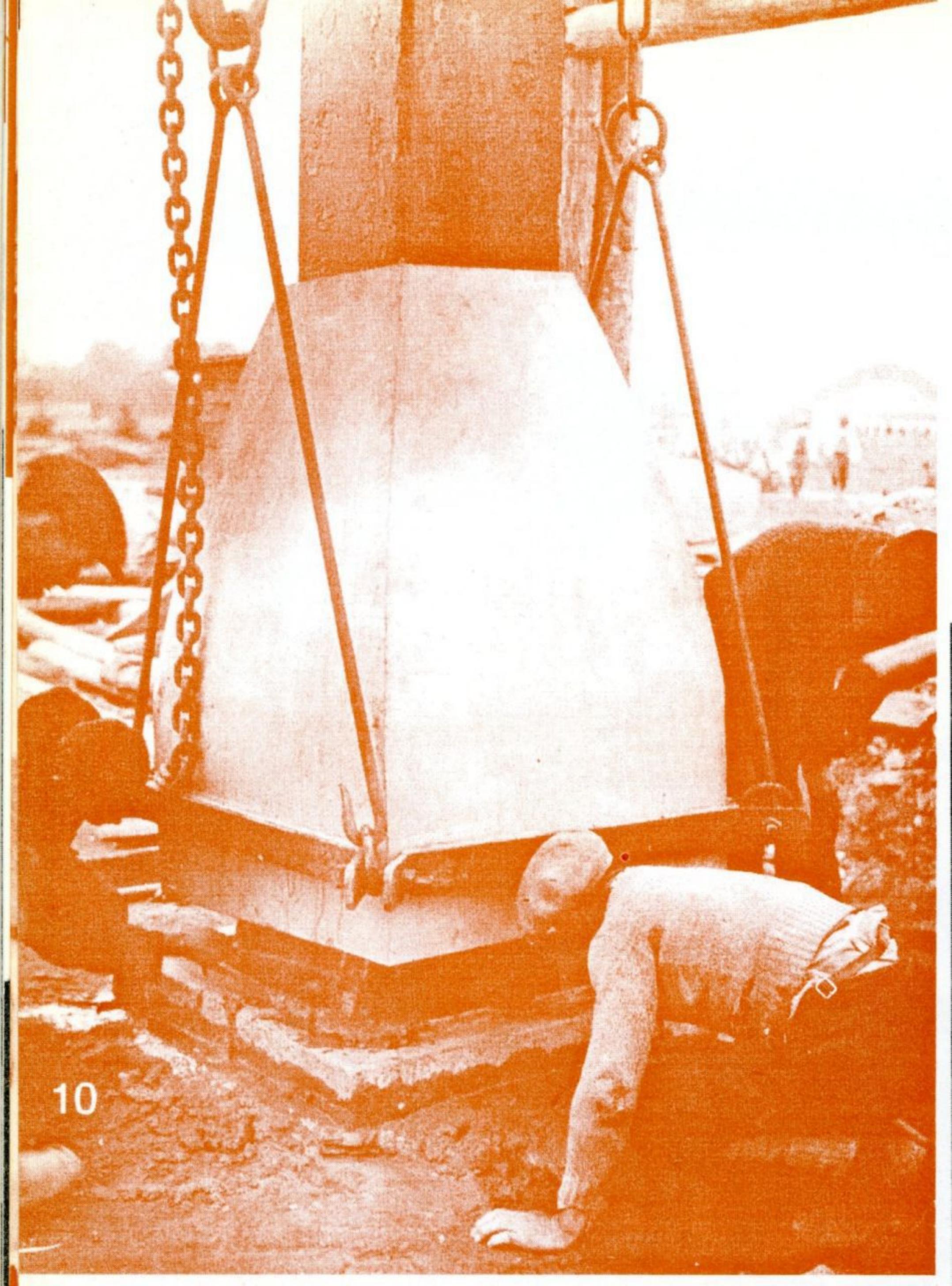


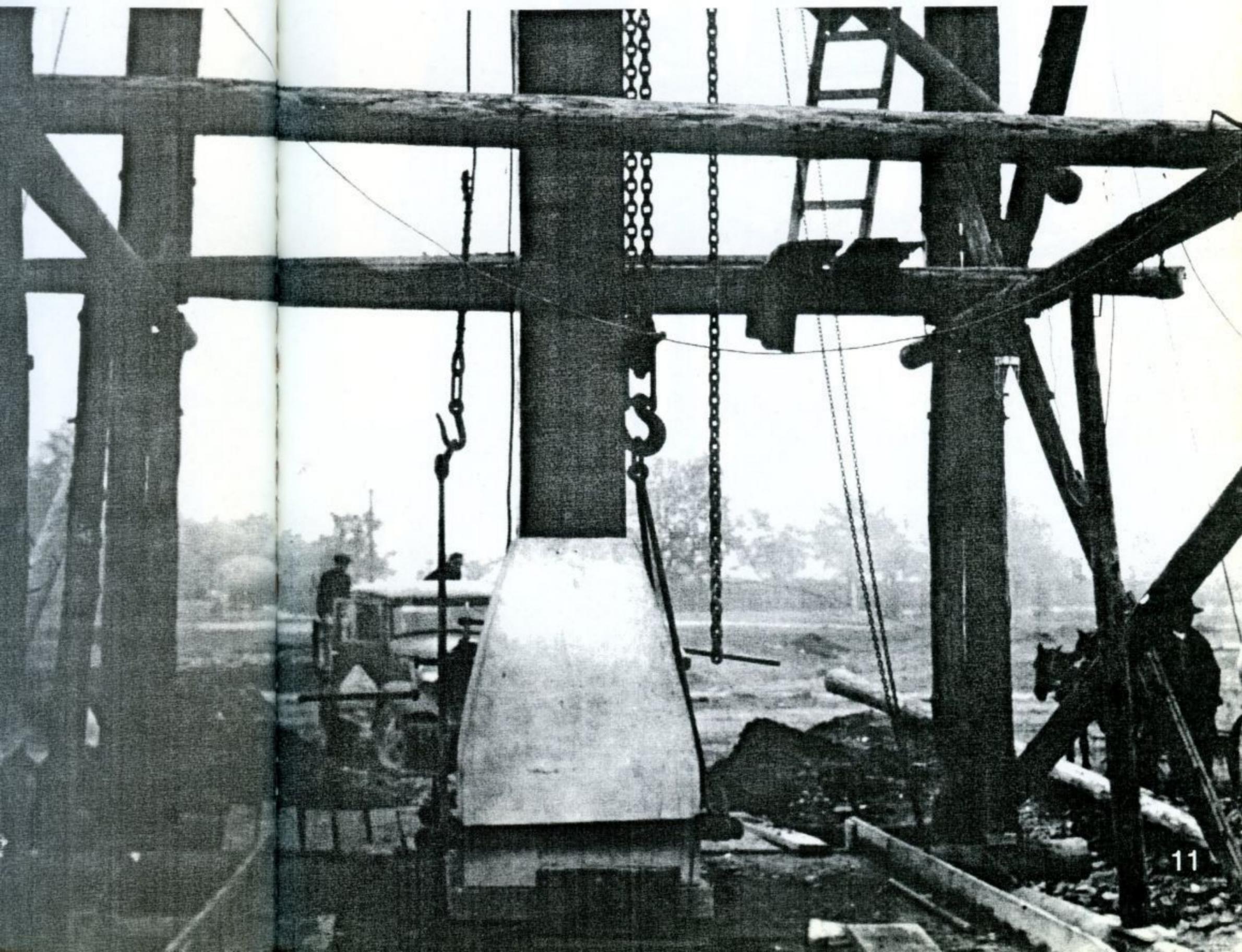






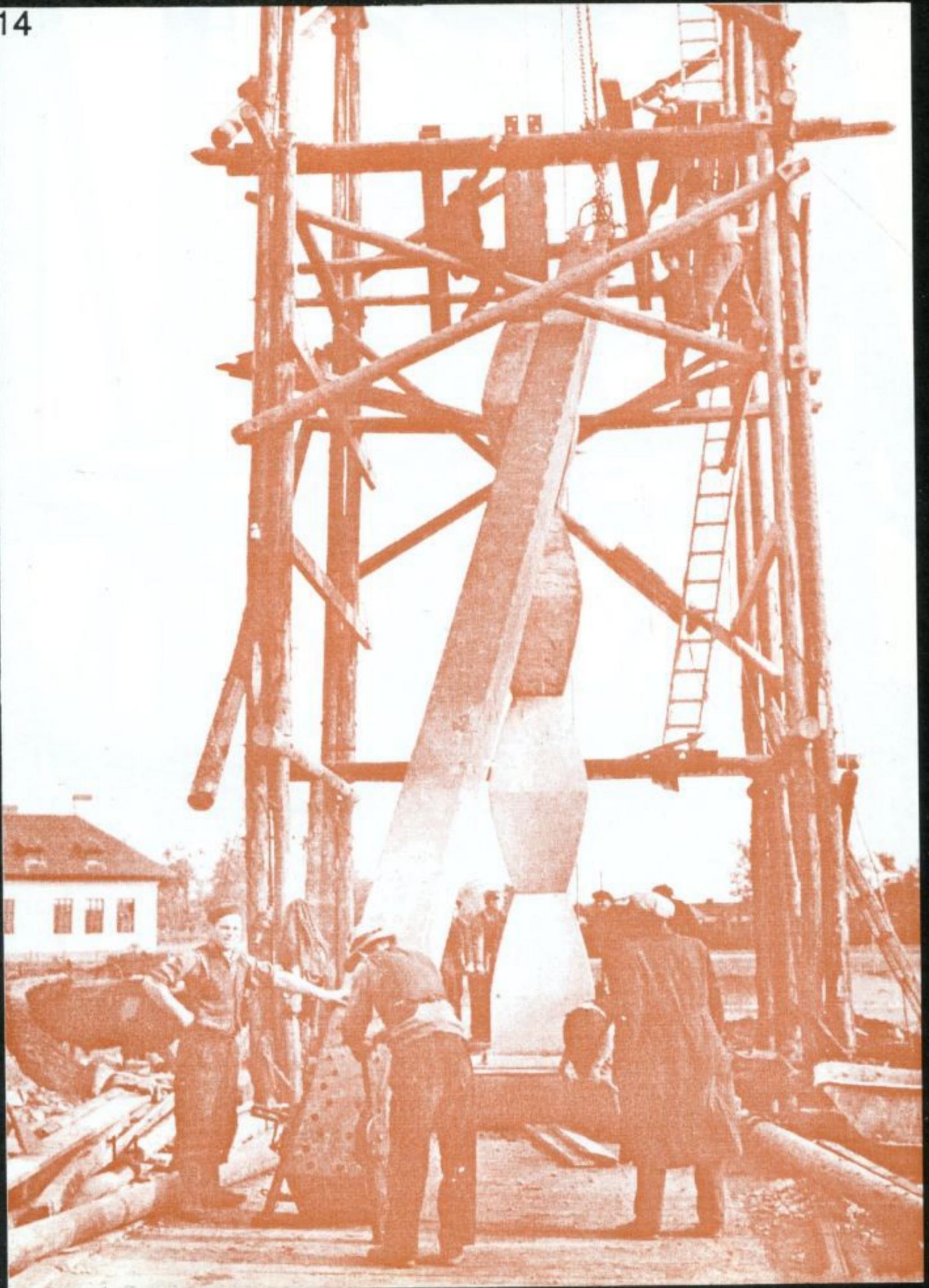


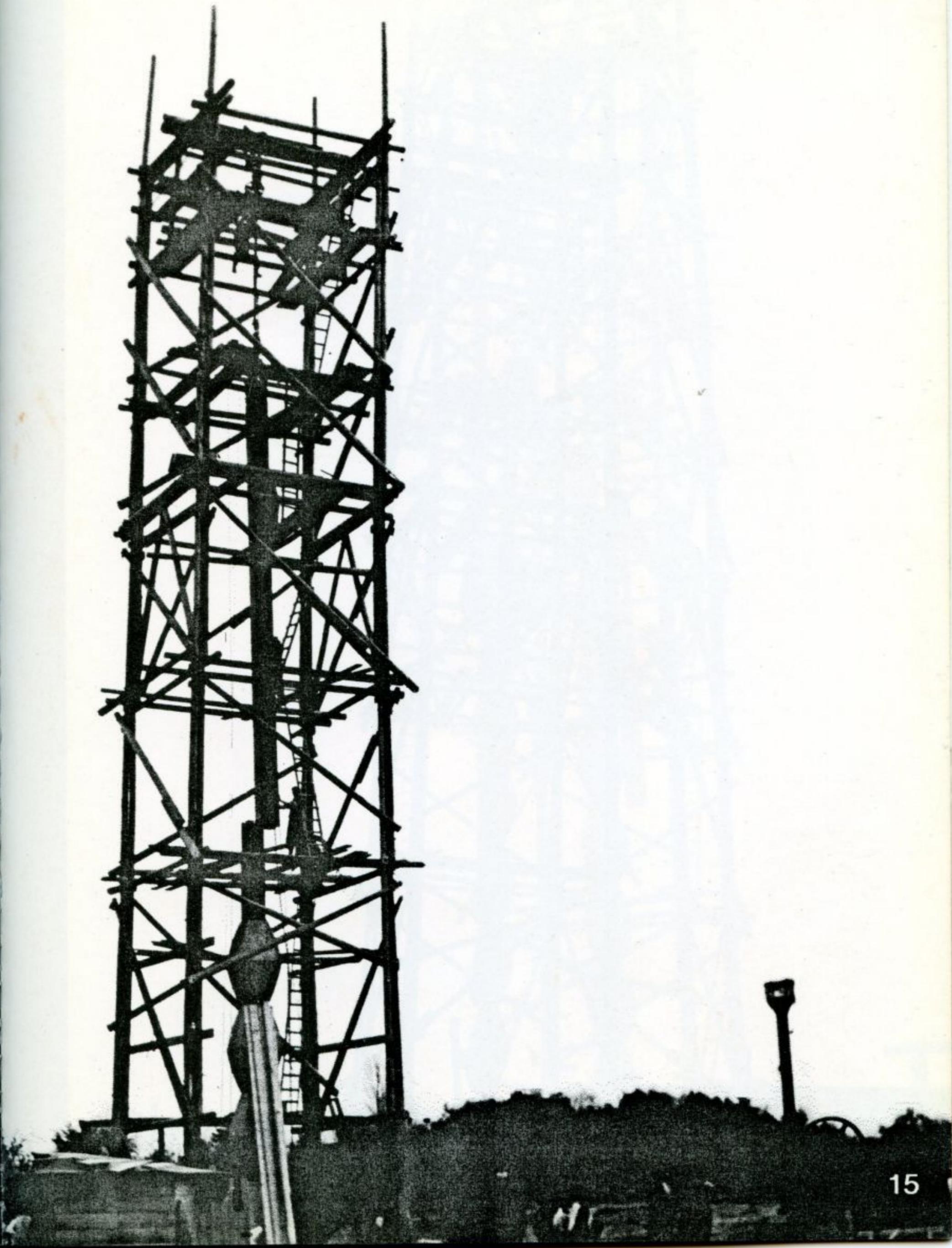






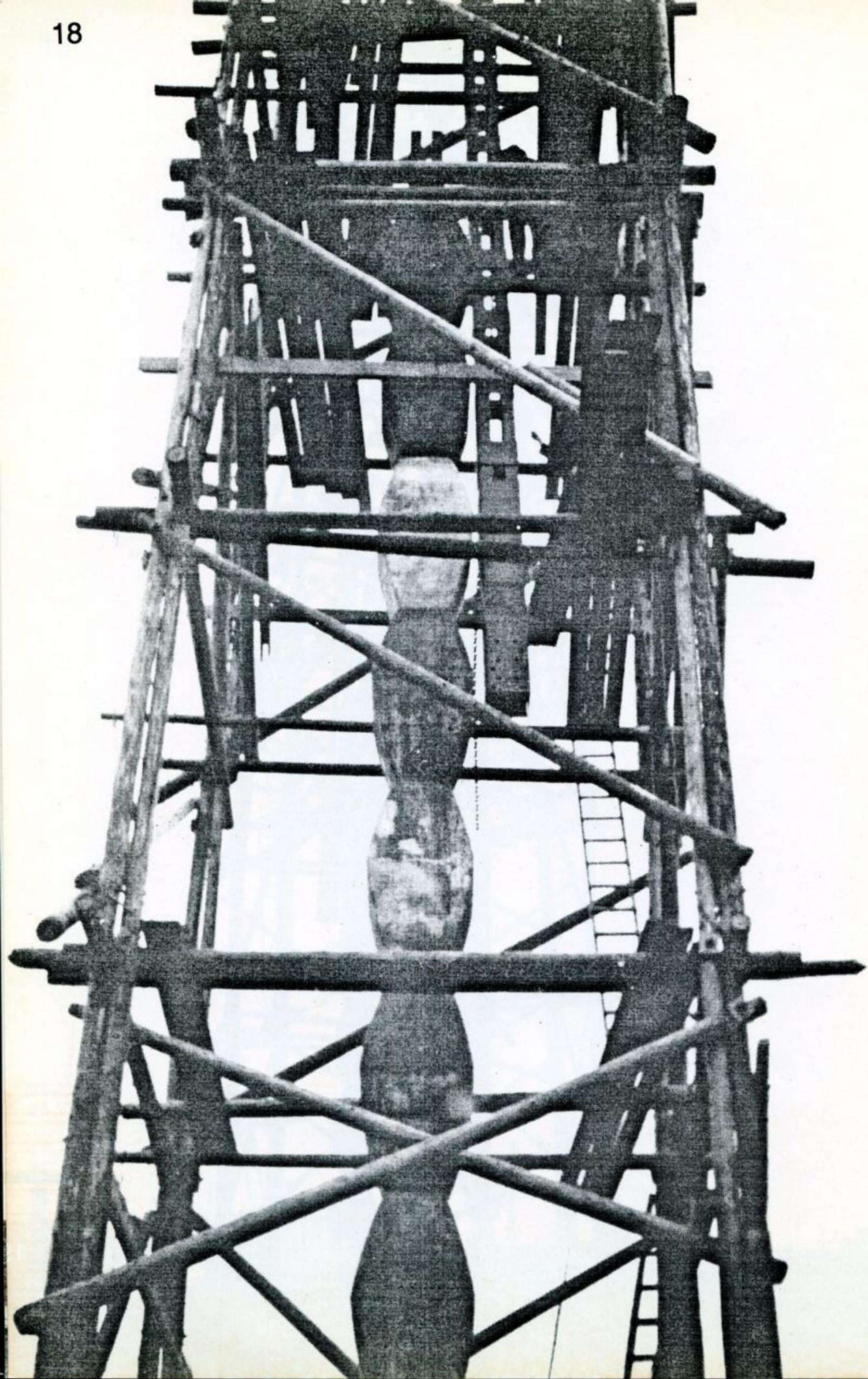


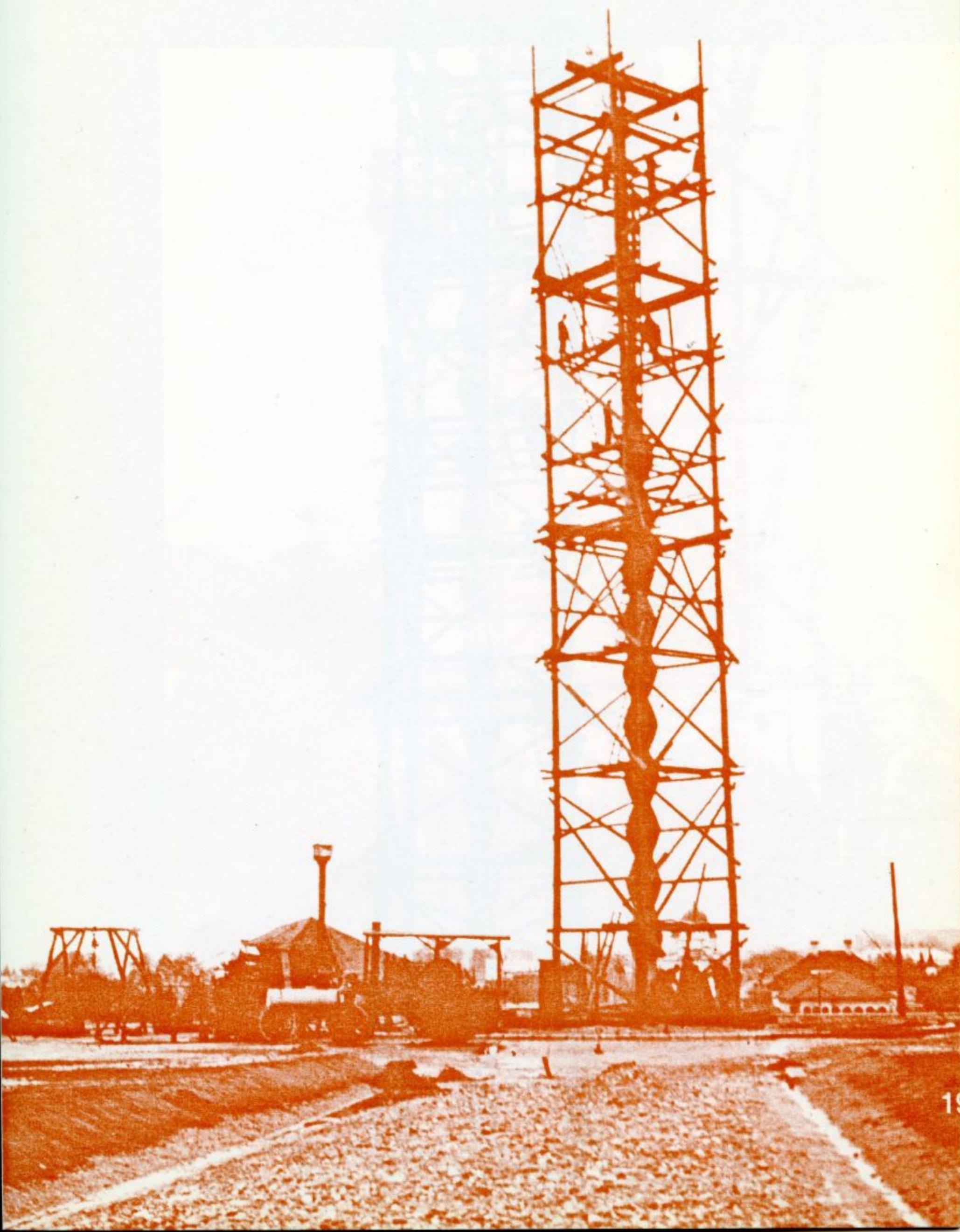


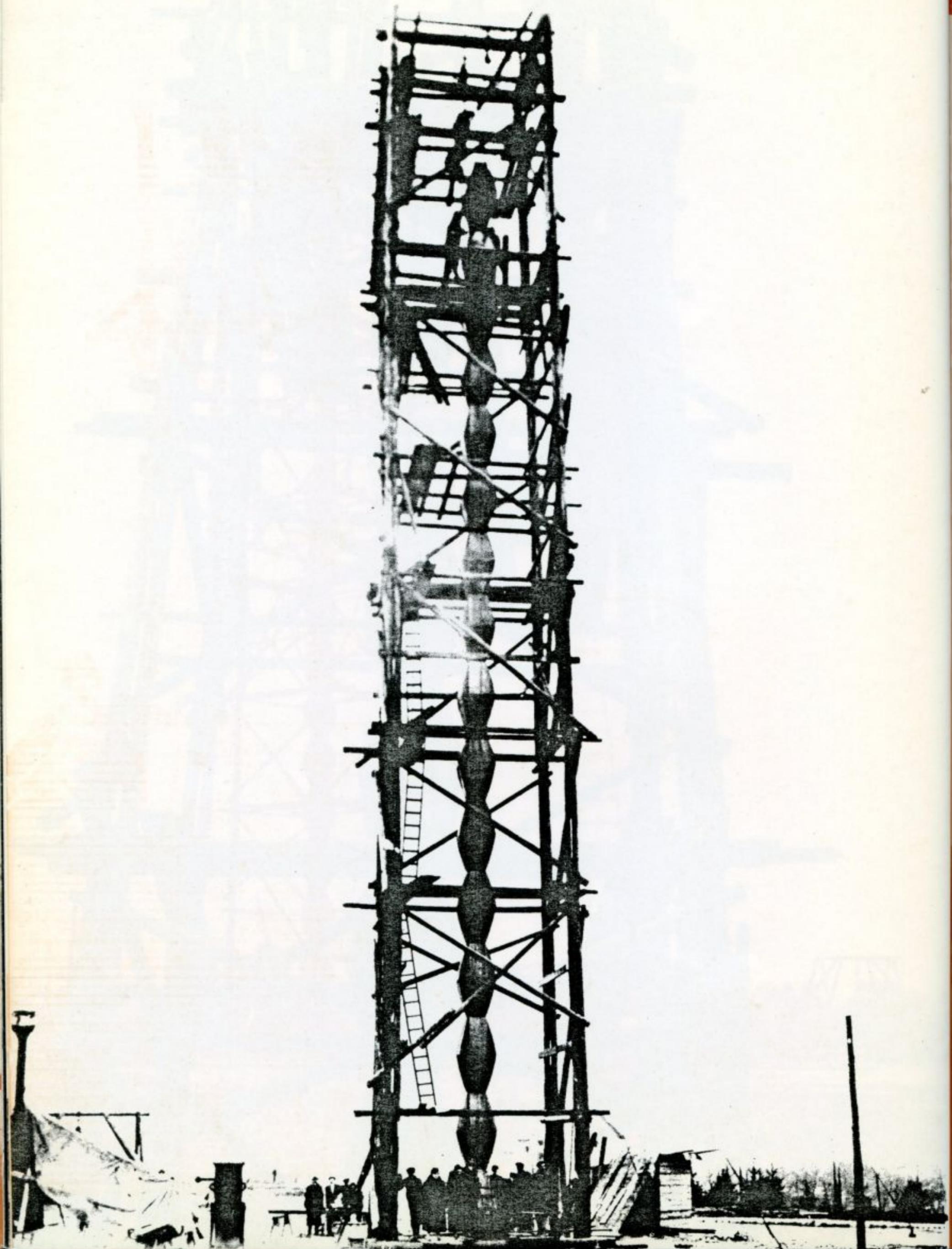




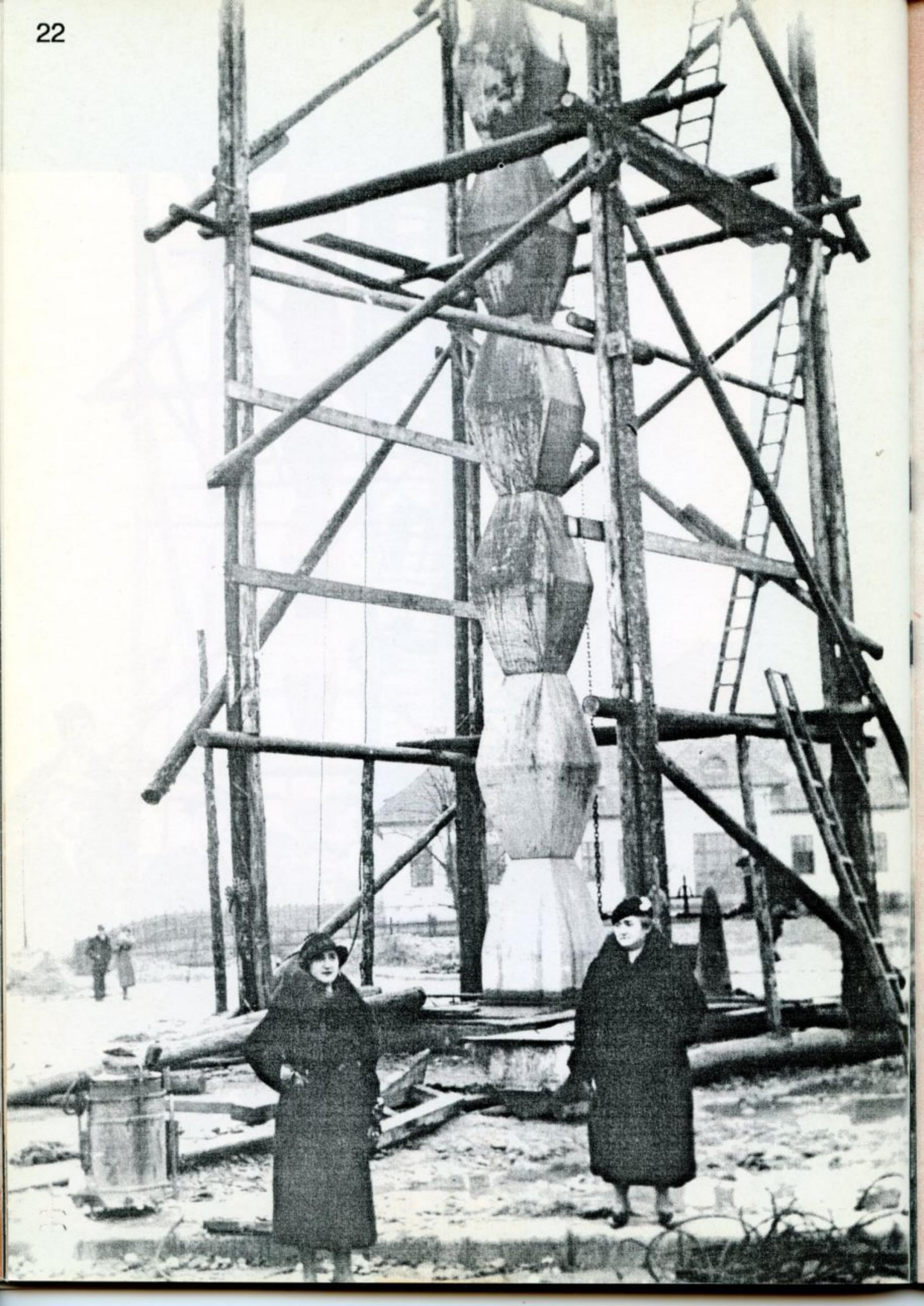














Layout:
Popa Vlad Radu
UNIVERS ENCICLOPEDIC

Tipărit la
Editura și Atelierele Tipografice **METROPOL**

ISBN 973-9155-93-6