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DESCRPTION OF WORKS AND BILL OF QUANTITIES

Contractor: MBELLEH CONSTRUCTION ENTERPRISE

Project Title: RENOVATION OF THE GROWTH CENTRE, KPADEBU, SIERRA LEONE

Contract No: Original contract

Item	Description	Unit	Qty	Work completed	Remarks
1	FOOD PROCESSING CENTER				
1.1	SUBSTRUCTURE WORKS				
	EXCAVATION AND EARTHWORKS				
	EXCAVATION				
	Excavate trench starting at existing ground level not exceeding 2'-0" in width, maximum depth not exceeding 3'-0"	m3	42.85	100%	
	Filling to excavations with selected materials arising from the excavations compacted in layers	m3	30	100%	
	SUBSTRUCTURE WORK				
	Filling to make level over 9" with hardcore obtain on site	m3	12	100%	
	Ditto average 6" thick with hardcore obtain off site	m3	6	100%	
	CONCRETE WORK				
	Plain in-situ concrete (1:3:6 - 1 1/2" aggregate) 135 CY in foundation trenches 6' -9" poured against faces of excavation			100%	
	Blockwork in Foundation				
	Precast sandcrete block, bedded and jointed in cement/sand mortar (1:4) in 6" thick solid wall				
	blocks	m	650	100%	
	Cement	bag	12	100%	
	Sand	trip	0.8	100%	
	CONCRETE FLOOR SLAB				
	Plain in-situ concrete (1:3:6 - 3/4" aggregate) in floor slab 4" thick, trowelled finish including formwork (27.89m ²) (ADDITIONAL WORKS)			100%	

Item	Description	Unit	Qty	Work completed	Remarks
	SUBMITTALS/TESTS				
	Reinforced in-situ concrete mix 1:2.4 ratio for beam/finish				
	Cement	nr		100%	
	Sand	bag		100%	
	Aggregate	cyp		100%	
	1/2" diameter high tension steel	ton		100%	
	1/4" diameter high tension steel (links)	lgh		100%	
	Binding wire	roll		100%	
	Blockwork				
	Precast concrete block, bedded and jointed in cement/mortar (1:0) in 6" thick solid wall				
	6" thick blocks	nr	150	100%	
	Cement	bag	30	100%	
	Sand	cyp	1	100%	
	6" thick ventilation blocks	nr		100%	
	Roofing				
	Construction of treated timber trusses and roof frames is in progress although some problem is not as per specification.			100%	
	Roof covering with galvanized corrugated roofing sheets 24 gauge x 8' x 0' long fitting with roofing nails and felt underlaid minimum 6" ribs and end overlaps with required depth of eave.			100%	
	Fitting of 20 gauge x 15" girth roll on top of ridge			100%	
	Fitting of 1" x 9" fascia board			100%	
	Plaster, Wall and Ceiling Finishes				
	1/2" thick cement and sand (1:6) rendering to walls (externally & internally)			100%	
	Fitting of 2" x 2" ceiling beams 4'-0" x 2'-0"			100%	
	8'-0" x 4'-0" hardwood silled to horizontal ceiling and beams internally fitting of 9" x 1 1/2" cover strips			100%	
	Preparation and the application of concrete (wherever) to rendered walls (externally & internally)			100%	
	Preparation and the application of concrete (wherever) to horizontal ceiling internally			100%	
	Doors				
	Fitting of standard angle mild steel flush doors complete with fittings			100%	
	Fitting of 6" double 9" is mild steel flush doors complete with fittings			100%	
	Windows				
	Fitting of standard angle mild steel windows complete with fittings			100%	
	Electrical Installation				
	Fitting of conduit pipes and MR boxes complete but the should follow all other electrical installation provisions/requirements and fittings.			100%	
	External Works				
	Concrete steps comprising 7" thick concrete (1:3:6 mix) 1/2" aggregate laid on 4" compacted hardcore around perimeter of building 2'-0" wide to 100% completed.			100%	

INDUSTRIAL

2 WELDING AND CARPENTRY SECTIONS

Item	Description	Unit	Qty	Work completed	Remarks
2.1	SUBSTRUCTURE WORKS				
	EXCAVATION AND EARTHWORKS				
	EXCAVATION				
	Excavate trench for show rooms (lino), starting at existing ground level not exceeding 2'-0" in width, maximum depth not exceeding 3'-0"	m3	15	100%	
	Filling to excavations with selected materials arising from the excavations compacted in layers	m3	12	100%	
	SUBSTRUCTURE WORK				
	Filling to make level over 9" with hardcore obtain on site	m3	5	100%	
	Ditto average 6" thick with hardcore obtain off site	m3	3	100%	
	CONCRETE WORK				
	Plain in-situ concrete (1:3:6 - 1 1/4" aggregate) in foundation trenches 6'-9" poured against faces of excavation			100%	
	Blockwork in Foundation				
	Precast sandcrete block, bedded and jointed in cement/sand mortar (1:4) in 6" thick solid wall				
	blocks	nr	150	100%	
	Cement	bag	6	100%	
	Sand	trip	0.5	100%	
	CONCRETE FLOOR SLAB				
	Plain in-situ concrete (1:3:6 - 3/4" aggregate) in floor slab 4" thick, screeded finish including formwork (27.8sqm) (ADDITIONAL WORKS)			100%	
	SUPERSTRUCTURE WORKS				
	Reinforced in-situ concrete mix 1:2:4 mix for beams/columns				
	Cement	bag	5	100%	
	Sand	trip	0.5	100%	
	aggregate	trip	0.3	100%	
	1/2" diameter high tension steel	ton	0.1	100%	
	1/4" diameter high tension steel (links)	lyth	10	100%	
	Bonding wire	roll	1	100%	
	Blockwork in superstructure				
	Precast sandcrete block, bedded and jointed in cement/sand mortar (1:6) in 6" thick solid wall				
	6" thick blocks	nr	500	100%	
	Cement	bag	48	100%	
	Sand	trip	13	100%	
	6" thick ventilation blocks	nr	50	100%	
	Complete construction of reinforced in-situ concrete slab for beams, lintels and columns.			100%	
	Construction of the roof.			100%	
	Finishing works.			100%	
	Completion of fixing of all doors and windows.			100%	
	Painting and Decoration.			100%	
	External Works			100%	

3 WATER WELL

Item	Description	Unit	Qty	Work completed	Remarks
3.1	EXCAVATION WORKS				
	Excavation in pit 6' 6" in diameter to receive concrete lining from ground level and removing excavated materials from site at a maximum depth not exceeding -				
	1' 0" - 3' 3"	Lp	2.11	100%	
	3' 3" - 6' 6"	Lp	3.01	100%	
	6' 6" - 13 deep	Lp	5.84	100%	
	13' 0" - 20' 0"	Lp	6.54	100%	
	Excavate pit 4' - 6" drain diameter below water table starting at 20' 0" depth and removing excavated materials from site, level and compact bottom maximum depth not exceeding				
	20' 0" - 28' 0" deep	Lp	2.7	100%	
	20' 8" - 33' 0" deep	Lp	3.11	100%	
	CONCRETE WORKS				
	Precast reinforced concrete caisson 100mm thick in 500mm high section, internal diameter 1200mm and external diameter 1400mm including making 12Nr slots pit caisson each size 200mm x 35mm including 2Nr 6mm diameter horizontal mild steel rods of length 4300mm each and 24 Nr 6mm diameter vertical mild steel rods each length 450mm and each caisson bedded and jointed in cement mortar 1:3 mix	Lp	1	100%	
	REINFORCED IN-SITU CONCRETE (1:2:4 - 3/4 AGGREGATE) INCLUDING REINFORCEMENT AND FRAMEWORK				
	Lining: 100mm thick x 1000mm internal diameter x 600mm high including apron	Lp	1	100%	
	Slab: 100mm thick including 100mm x 100mm up stand beam around the perimeter of well	Lp	1	100%	
	Gravel filling between reinforced concrete and caisson	Lp	1	100%	
	Provide and fix electric pump to well; electric submersible pump type rated at 5000 liters per hour and operating head 50 meters.	Lp	1	100%	
	WATER TOWER				
	Construct an H-block tower in 9" thick sandcrete blocks bedded and jointed in cement mortar (1: 6) including 2' - 3" wide x 9" thick concrete (1:3:6 - 1 1/2 aggregate) footing in trench and reinforced concrete slab platform at tank base	Lp	1	100%	

4 VIP TOILET

Item	Description	Unit	Qty	Work completed	Remarks
PIT					
	Excavate toilet pit, minimum 10' 0"	Lp	1	100%	
FLOOR					
	Overall floor size 10' x 16' 8" constructed of 1:2:4 mix concrete	Lp	1	100%	
WALL					
	Overall height 9' 0" constructed of 6" thick solid sandcrete blocks bedded and jointed in sand-cement mix 1:6	Lp	1	100%	
ROOF					
	Linte roof use gamba CI sheets end lap 9" and 2 corrugations side laps on 2" x 4" treated hardwood rafters dim 2 3" parties.	Lp	1	100%	
DOORS					
	Provide and install 6 No 2 3" wide x 6' 6" high beaten doors complete, painted gloss	Lp	1	100%	
APRON					
	Construct apron 2' 6" wide, 4" thick around building	Lp	1	100%	

DESCRPTION OF WORKS AND BLL OF QUANTITES

Contractor: MBEILLEH CONSTRUCTION ENTERPRISE

Project Title: RENOVATION OF THE GROWTH CENTRE, KPANDEBU, SIERRA LEONE

Contract No: Amendment No. 1 to the Original contract

Item	Description	Unit	Qty	Work completed	Remarks
1	FOOD PROCESSING CENTER				
a	WINDOWS AND DOORS				
	Reinforced insitu concrete mix (1:2:4 -3/4 aggregate) in rectangular lintels including reinforcement and formwork for 3 Nr opening of windows and cement mortar used for finishing works				
	Cement	nr	3	100%	
	Sand	bag	0.1	100%	
	aggregate	trip	0.1	100%	
	1/2" mid steel rod -40' long	trip	2	100%	
	1/4" mid steel rod -40' long	trip	1.1	100%	
	Binding wire	trip	4	100%	
	Wire nails (assorted)	pkts	4	100%	
	Timber for shuttering	pcs	5	100%	
	Bush sticks	doz	1	100%	
	ROOFING				
b	Provide and fix standard single steel window overall size 3' 3" wide and 4' 0" high complete with fenders, handles and steel plates used as window panes with accessories and enamel painted	Nr	3	100%	
c	Provide and fix double metal doors overall size 4' 0" x 6' 6" with locks and enamel painted (wherein it is indicated in the drawings for the replacement of a sliding door) as directed by the supervising engineer	bundle	1	100%	
2	ROOF				
a	Provide and fix transparent corrugated plastic sheets 8' 0" long complete accessories to treated hardwood purlins (remove already constructed roofing sheets and replace accordingly as directed by the supervising engineer	pcs	50	100%	

3	FINISHINGS				
a	Cement and sand (1:3) screed to concrete floors 2" thick				
	Cement	bags	14	100%	
	sand	trips	1	100%	
4	WASHING TROUGH				
a	Construction of washing trough with sandcrete blocks of length 6', width 2.5' and height 2' as directed by the supervising engineer				
	Cement	bags	1	100%	
	Sand	trips	0.03	100%	
	Sandcrete blocks 6' x 9" x 14'	Nr	20	100%	
b	Provide and fix wall tiles 6" 6" x 1' 4" white glazed ceramic tiles fixed at regular pattern		Carton (84 pcs)	100%	
	Cement	bags	3	100%	
	Sand	trips	0.1	100%	
5	EXTRNAL WORKS				
a	DRAINAGES				
	Provide and fix 4" diameter PVC vent pipe securely screwed to wall with brackets and jointed with elbows, T-piece fittings and accessories to pipe at an approved gradient in order to collect waste water from the buildings and dposite it at an approved location as directed strictly by the supervising engineer.	LP	1	100%	
b	SOAKAWAY PIT				
	excavate pit to a depth of 5m and width 2.0m and remove and depose of excavated matelals to a suitable location as directed by the supervising engineer	Lp	1	100%	
	Fill the excavated pit with lateritic boulders up ground level and cover the pit	Lp	1	100%	
c	WATER TANK				
	Provide 1000 litres water tank (rubber) with basic plumbing fittings and fix to already built water tower	LP	1	100%	

DESCRIPTION OF WORKS AND BILL OF QUANTITIES

Contractor: MBEILLEH CONSTRUCTION ENTERPRISE

Project Title: RENOVATION OF THE GROWTH CENTRE, KPANDEBU, SIERRA LEONE

Contract No: Amendment No. 2 to the Original contract

Item	Description	Unit	Qty	Work completed	Remarks
A	FOOD PROCESSING CENTER.				
1	CONCRETE FLOOR SLAB				
	Plain in-situ concrete (1:3:6 - 3/4" aggregate) in floor slab 4" thick, trowelled finish including formwork (27.89m ²)				
	Cement	nr	90	100%	
	Sand	bag	3	100%	
	aggregate	trip	5	100%	
2	DOORS				
	Provide and fix standard section mild steel single flush door	Nr	5	100%	
				100%	
	Provide and fix standard section mild steel double door with locks and fittings	Nr	2	100%	
3	ROOFING				
	Additional roofing materials 28 gauge C I sheets	bundles	2	100%	
	Roofing nails	boxes	2	100%	
	2" x 4" x 14'	pcs	20	100%	
	2" x 3" x 14'	pcs	10	100%	
4	CEILING				
	Hard board (8' x 4') used as ceiling and 4' x 2' spacing of ceiling joist	pcs	30	100%	
	2" x 2" x 14'	pcs	20	100%	
	2" x 2" x 14'	pcs	40	100%	
	Cover strips (fillet)	bundle	5	100%	
	Ceiling nails	pkts	10	100%	
	Painting	Lp	1	100%	

B	WELDING AND CARPENTRY SECTION				
1	CONCRETE FLOOR SLAB				
	Plain in-situ concrete (1:3:6 - 3/4" aggregate) in floor slab 4" thick, trowelled finish including formwork (17.8m ³)				
	Cement	nr	60	100%	
	Sand	bag	2	100%	
	aggregate	trip	4	100%	
2	DOORS				
	Provide and fix standard section mild steel double door with locks and fittings	Nr	1	100%	
3	ROOFING				
	Additional roofing materials 28 gauge C I sheets	bundles	2	100%	
	Roofing nails	boxes	3	100%	
	2" x 4" x 14'	pcs	30	100%	
	2" x 3" x 14'	pcs	10	100%	
	2" x 6" x 14'	pcs	15	100%	
	1" x 9" x 14'	pcs	5	100%	
	Wire nails	pkts	40	100%	

Annex 1

DESCRIPTION OF WORKS AND BILLS OF QUANTITIES
DESCRPTION OF WORKS AND BLL OF QUANTITIES

Contractor: MBELLEN CONSTRUCTION ENTERPRISE

Project Title: RENOVATION OF THE GROWTH CENTRE, KPANDEBU, SIERRA LEONE

Contract No: Amendment No. 3 to the Original contract

NO	DESCRIPTION	UNIT	QTY	Work completed	Remarks
Construction of the Generator House at the Kpandebu Growth Center					
1	TRENCH EXCAVATION: Excavate trench to a maximum stable soil and width not exceeding 450mm.	m ³	3.6	100%	
	Ditto into hard rock	m ³	1.7	100%	
2	Concrete Work in foundation - pour mass concrete into foundation trench using 1:3:6 mix	m ³	1.2	100%	
3	Block work - use 225 mm thick sandcrete blocks lay flat in cement - sand mortar	m ²	7.9	100%	
4	Backfilling: using laterite soil	m ³	5.4	100%	
	laterite stone	m ³	10.9	100%	
5	Reinforced over site concrete 150mm thick slab using 1:2:4 mix ratio in 3/4 aggregates (using BRC Bars)	m ²	1.6	100%	
	reinforcement: using 12mm diameter bars into columns, beam, lintel including all works	pcs	16	100%	
	Binding wire	roll	0.9	100%	
	Form work to sides of slab using soft wood timbers	m	27	100%	
	Sub Total Foundation work				
11	ELEVATION WALLS				
	Using 150mm thick sandcrete blocks	m ²	39.6	100%	
	Verte block	m ²	2.2	100%	
	Sub Total Walls				
111	Roofing work				
	using 28 gauge CS sheet	m ²	26.3	100%	
	Using 50x100mm timber as rafters	m	25	100%	
	50 x 100mm as purlins	m	20	100%	
	50 x 100mm battens	m	10	100%	
	25 x 200mm battens	m	15	100%	
	Sub Total Roofing				
IV	Finishing				
1	Plastering in cement - sand mortar 13mm thick plaster	m ²	79.2	100%	
	Screeding using cement - sand mortar making 50mm thick screed	m ²	11	100%	
	Painting using white lime	m ²	79.2	100%	
	Enamel paint in double coat	m ²	79.2	100%	
	Door - using steel metal with vent / guardbars 1500mm above complete with locks - standard door opening not exceeding 1200mm width.	No	1	100%	
	Sub Total Finishing			100%	
12	External works	lumpsum		100%	

13 TOTAL INCREASE IN PRICE OF MATERIALS AGREED UPON

100%

MBEILLEH CONSTRUCTION ENTERPRISES

DESCRIPTION OF WORKS AND BILLS OF QUANTITIES

Contractor: Mbeilleh construction enterprise


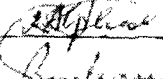
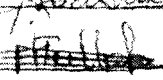
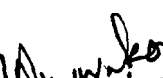
BILL OF QUANTITY OF WATER SUPPLY SYSTEM

Project Title: RENOVATION OF THE GROWTH CENTRE, KPANDEBU SIERRA LEONE

Contract No: Amendment No. 3 to the original contract

No	Material	Unit	Quantity	Works completed	Remarks
1	Pipe 1/2" PVC	Length	4	100%	
2	Elbows 1" PVC	No	1	100%	
3	Tees 1" PVC	No	1	100%	
4	Adaptors 1" PVC	No	1	100%	
5	Valves 1" PVC	No	3	100%	
6	Pipe 3/4" PVC	No	20	100%	
7	Elbows 3/4" PVC	No	60	100%	
8	Tees 3/4" PVC	No	30	100%	
9	Adaptors 3/4" PVC	No	30	100%	
10	Gate Valve 3/4" Valve	No	25	100%	
11	Stop Cock 3/4" Solve	No	20	100%	
12	Tapes 3/4" galv	No	6	100%	
13	Tapes 3/4" spring	No	6	100%	
14	Solvent	No	20	100%	
15	Crushing 3/4" galv	No	15	100%	
16	Crimenco	No	6	100%	
17	Socket 3/4" galv	No	12	100%	
18	Elbows 3/4" galv	No	15	100%	
19	Tees 3/4" galv	No	15	100%	
20	Thread Seal	No	2	100%	
21	Bank Connector 1 3/4" PVC	No	4	100%	
22	Pipe 3/4" galv	No	6	100%	
23	Nipples 3/4" galv	No	20	100%	
24	Brushing 1 1/4" galv	No	4	100%	
25	Nuts 3"	pkt	2	100%	
26	Nipples 1" galv	No	4	100%	
27	Socket 1" galv	No	5	100%	
28	Pipe 1 1/2" PVC	No	6	100%	
29	Elbows 1 1/2" PVC	No	10	100%	
30	Tees 1 1/2" PVC	No	6	100%	
31	Flugs 1 1/2" PVC	No	4	100%	
32	Wast Union 1 1/2" PVC	No	4	100%	
33	Foot Valve 1" galv	No	2	100%	
34	Rope Nylon	Roll	1	100%	
35	Elbows 1" galv	No	8	100%	
36	Rock Saw blade	No	4	100%	

Signatures:

- Mr. Stephen Kargbo, Head of UNIDO Operations  Date: 24/03/09
- Ms. Evelyn Alpha, National consultant  Date: 21/3/09
- Kpandebu Growth Centre Manager  Date: 21/3/09
- Contractor, Mbeilleh Construction Enterprise,  Date: 21/3/09
Mr. Fullah

Mr. N. Samarakoon, Project Manager  Date: 26.03.09
26/3/2009

E. Alpha

Date: *21/3/09*

UNIDO Consultant: Evelyn Alpha

S. B. Kargbo

Date: *24/03/2009*

UNIDO Head of Operations: Stephen B. Kargbo

~~M. Fullah~~


Date: 21/3/09.

Contractor: Mohamed Fullah - Kpandebu Growth Centre

Bockarie

Date: 21.3.09.

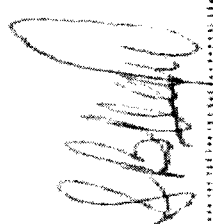
Growth Centre Manager: M.A.J Bockarie


Date: 21/3/09

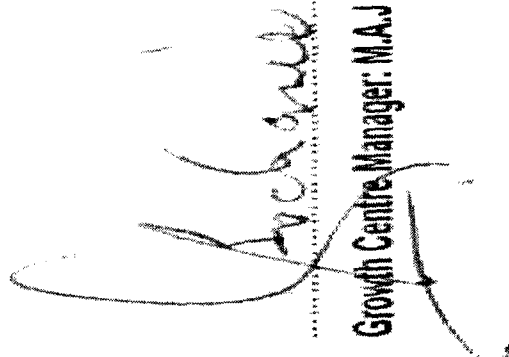
UNIDO Consultant: Evelyn Alpha


Date: 21/3/09

Contractor: Mohamed Fullah - Kpandebu Growth Centre


Date: 24/03/2009

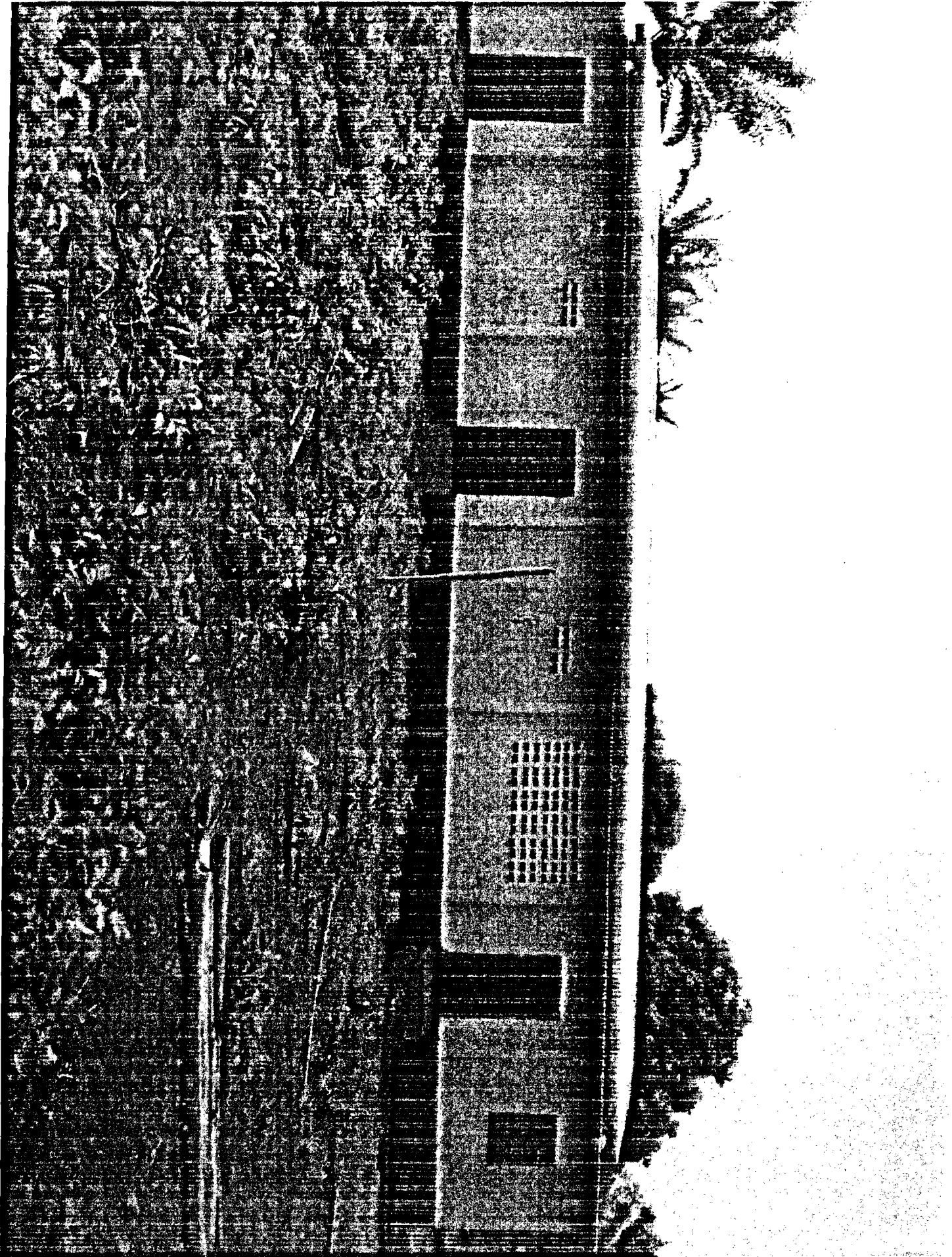
UNIDO Head of Operations: Stephen B. Kargbo


Date: 21.3.09

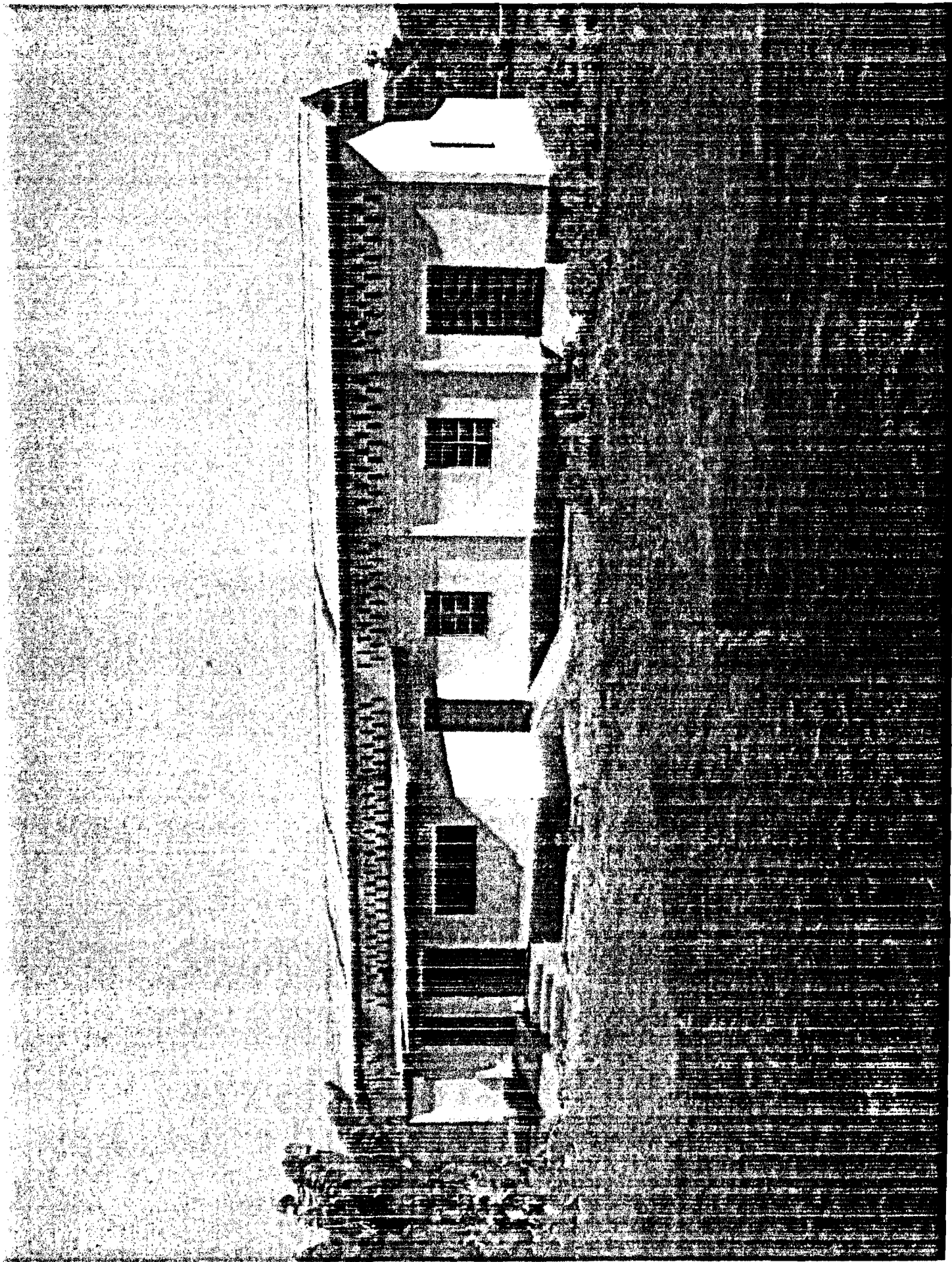
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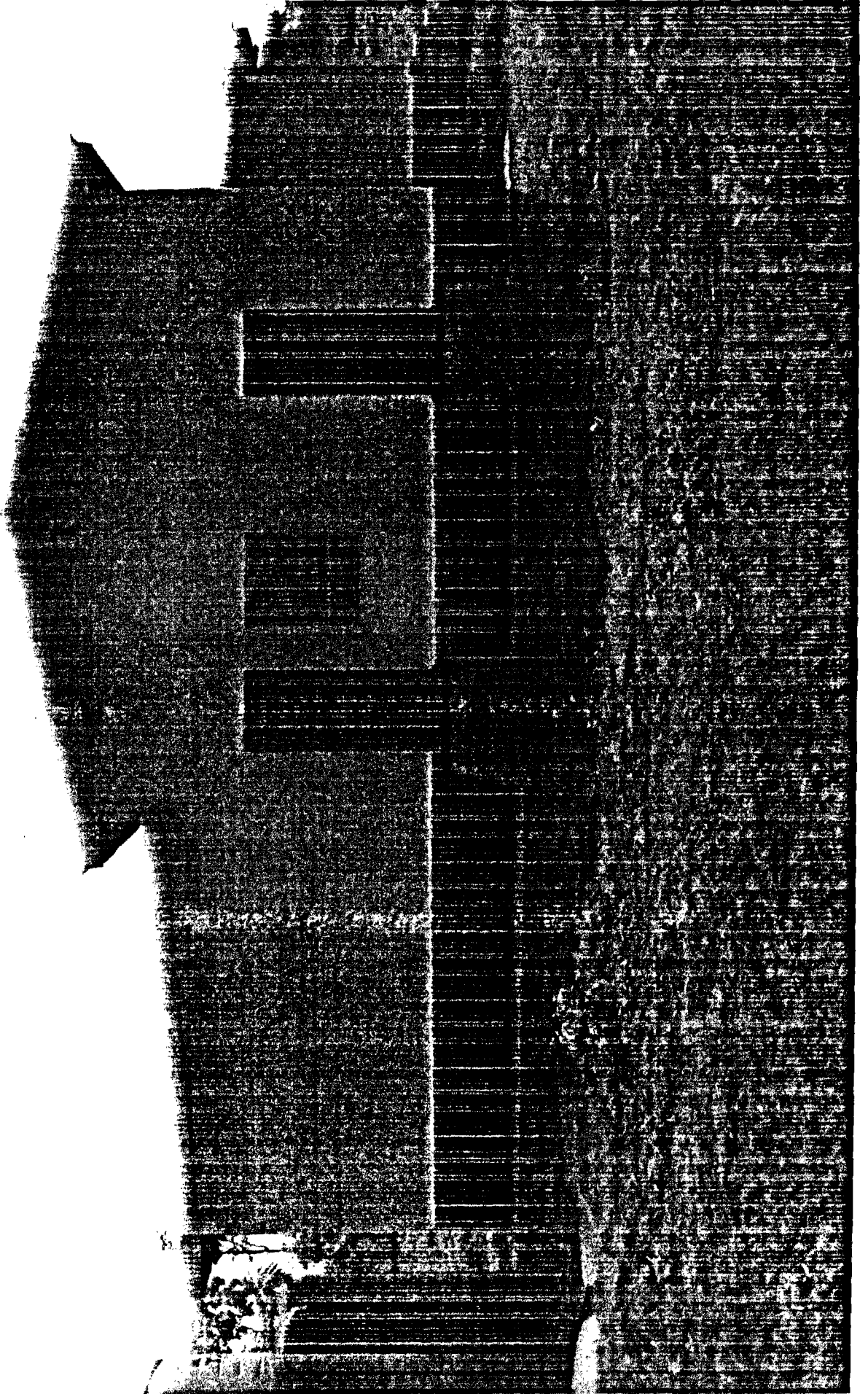
Assessment pictures: Kpandebu Growth centre

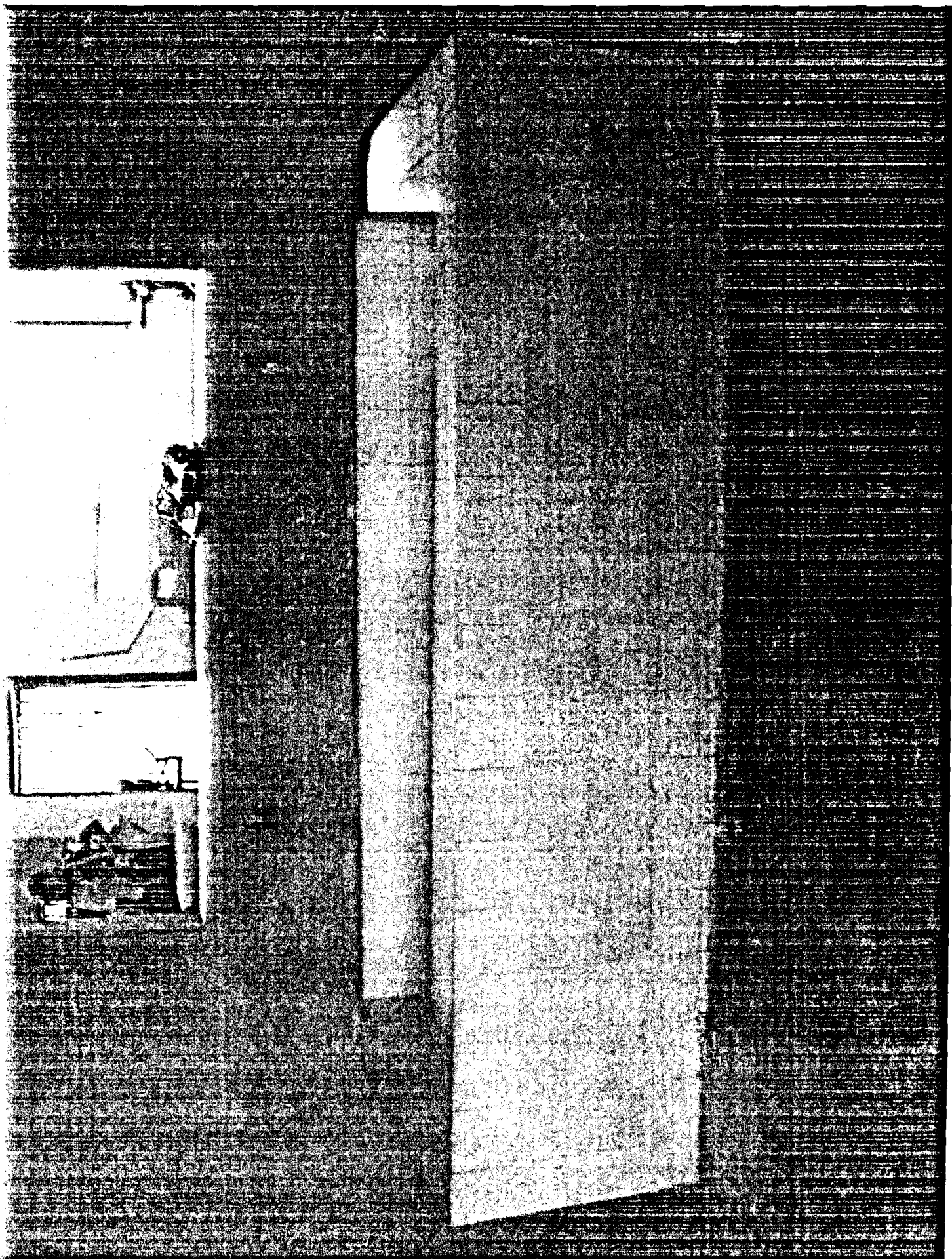
- slides 2-12 show to food processing unit
- Slides 13-19 show pictures of black smithing and carpentry unit
- Slides 20-23 show pictures of the VIP toilet
- Slides 24-26 show pictures water supply system installation
- Slides 27-29 show pictures of generator house
- Slide 30 shows pictures of drying platform

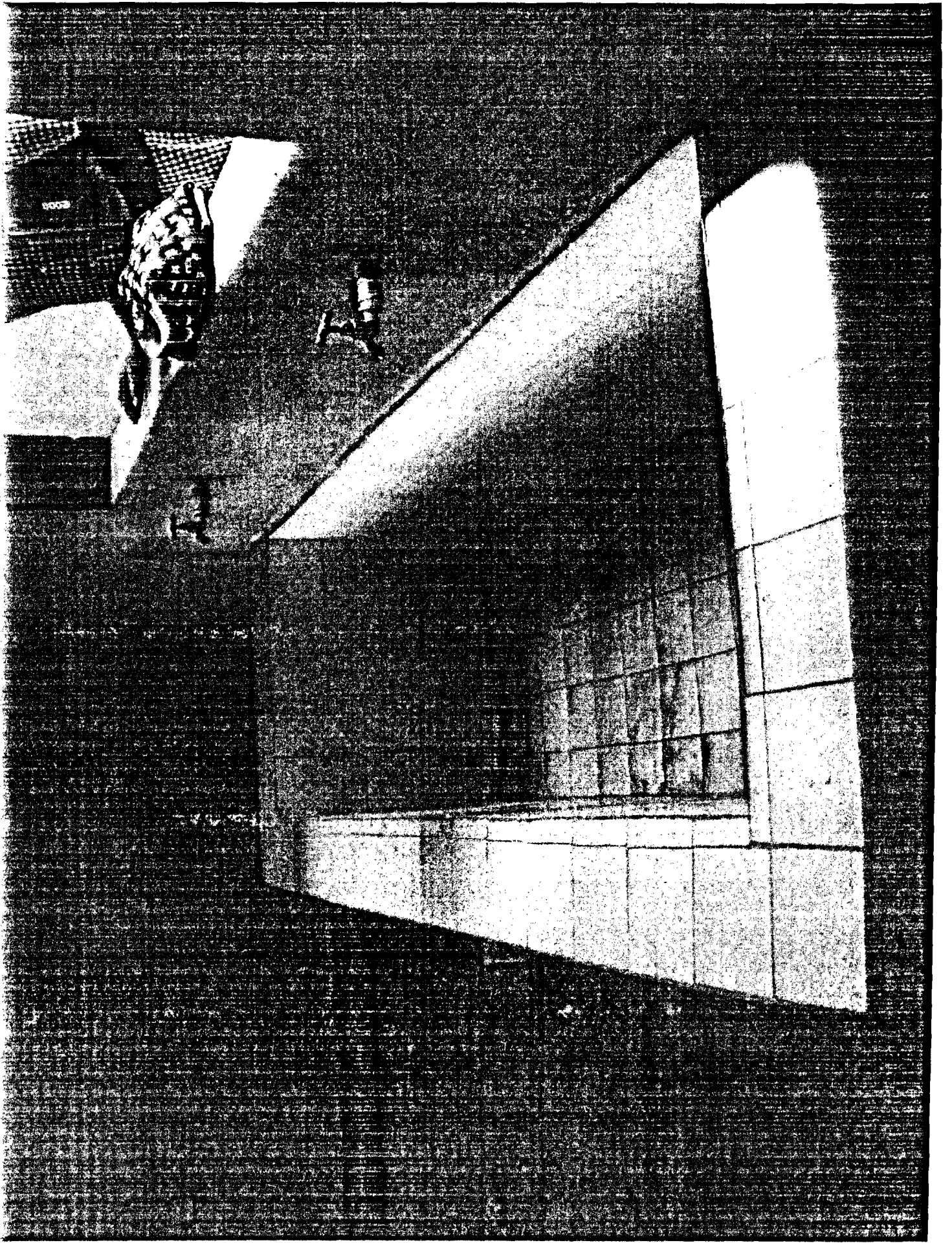


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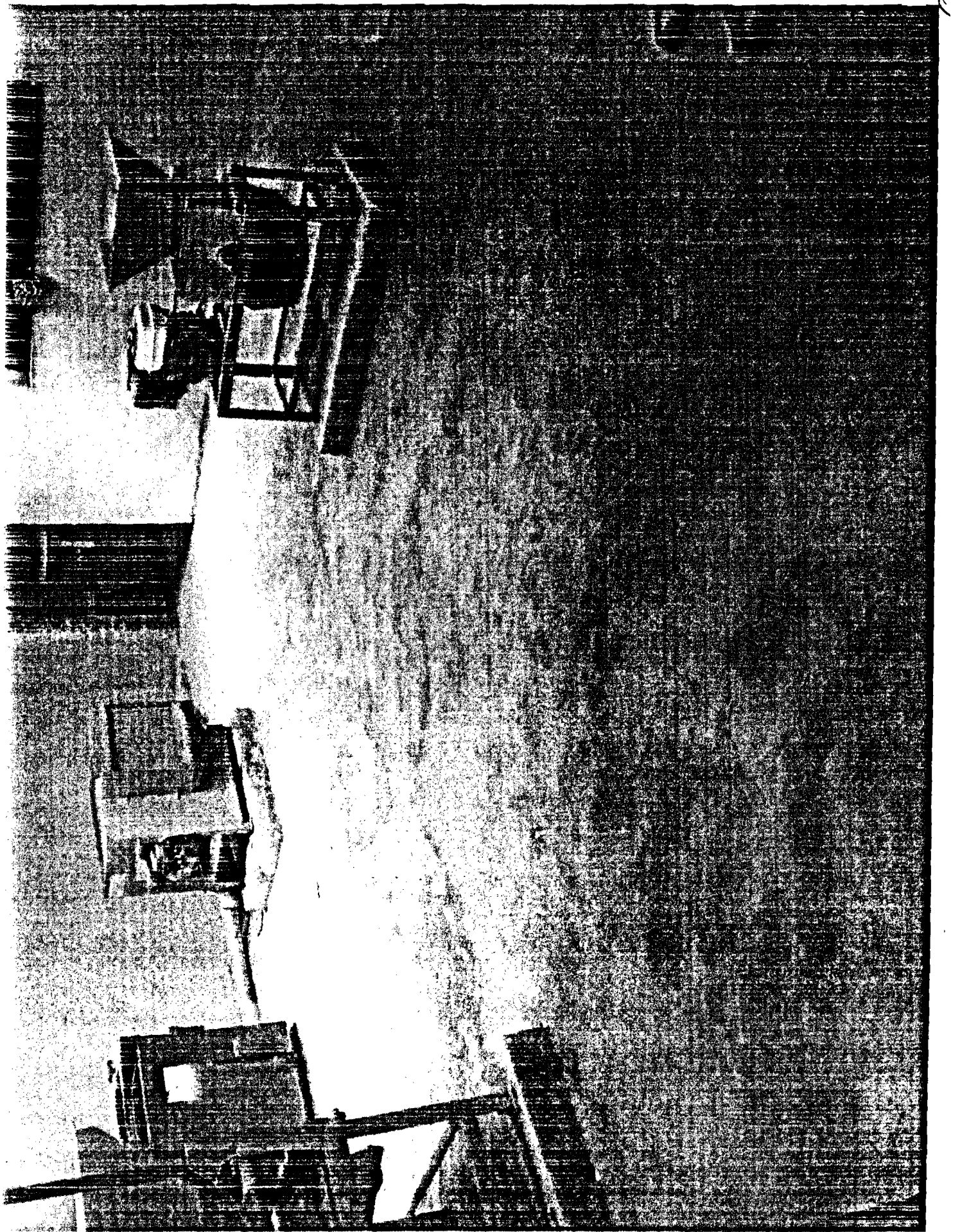


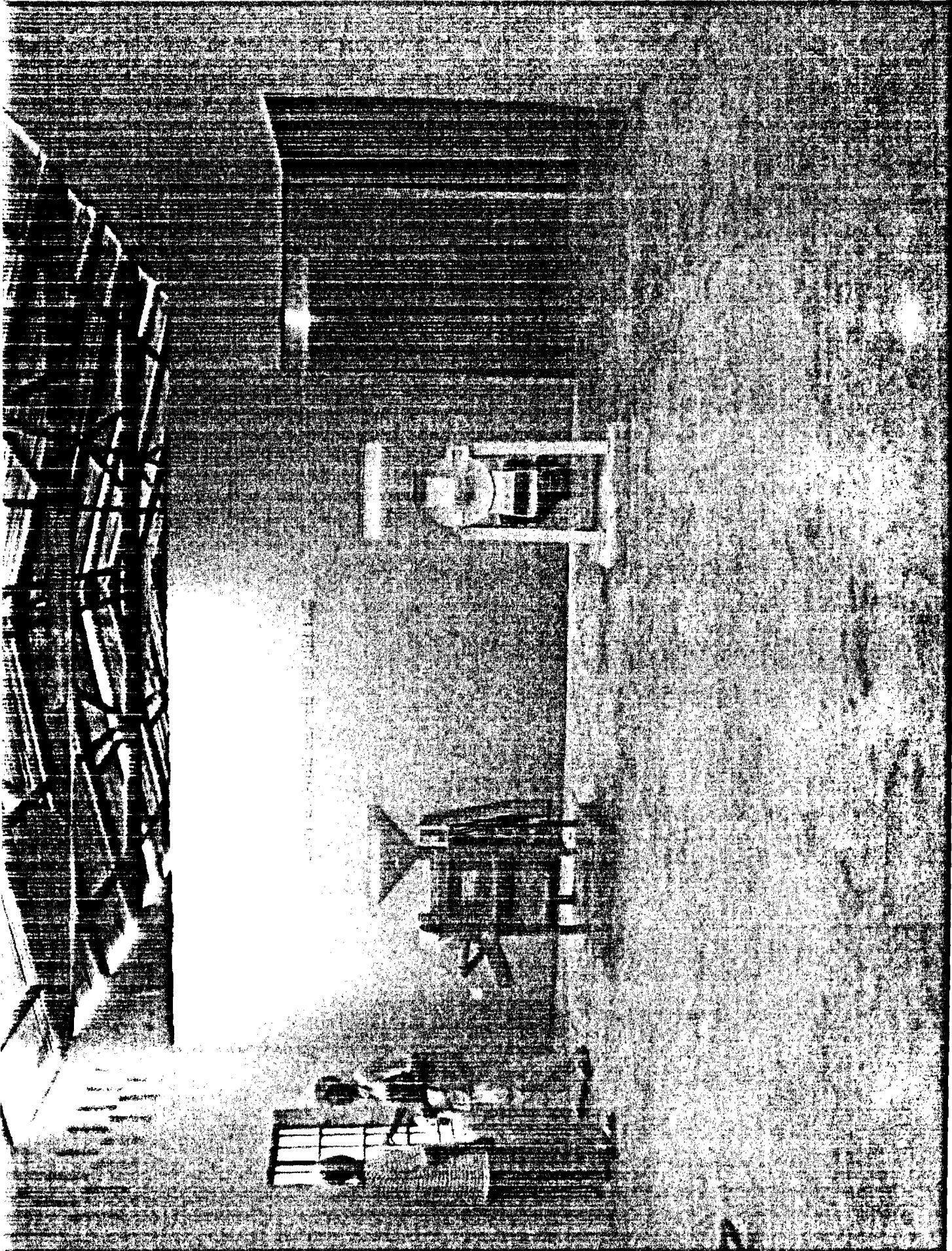




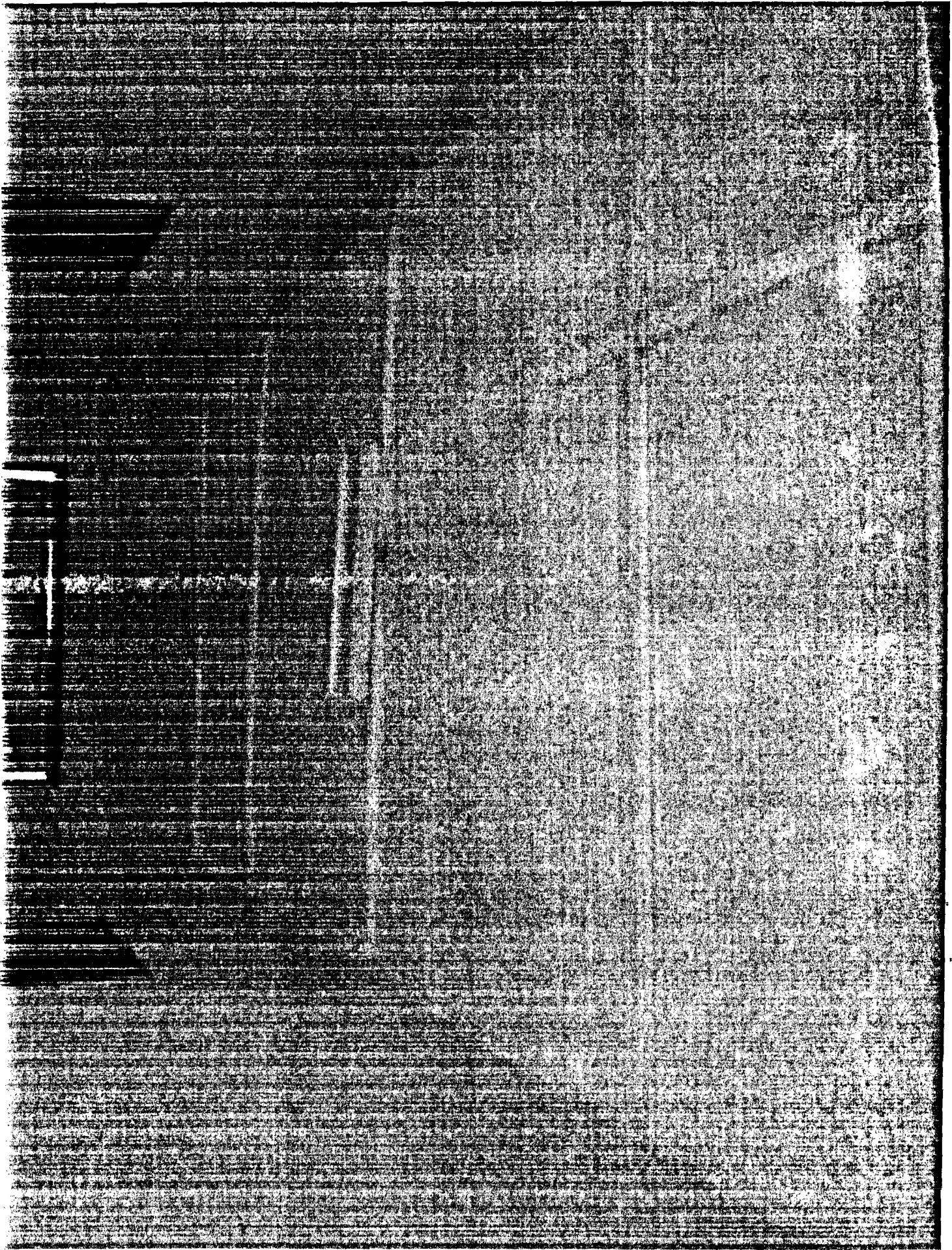


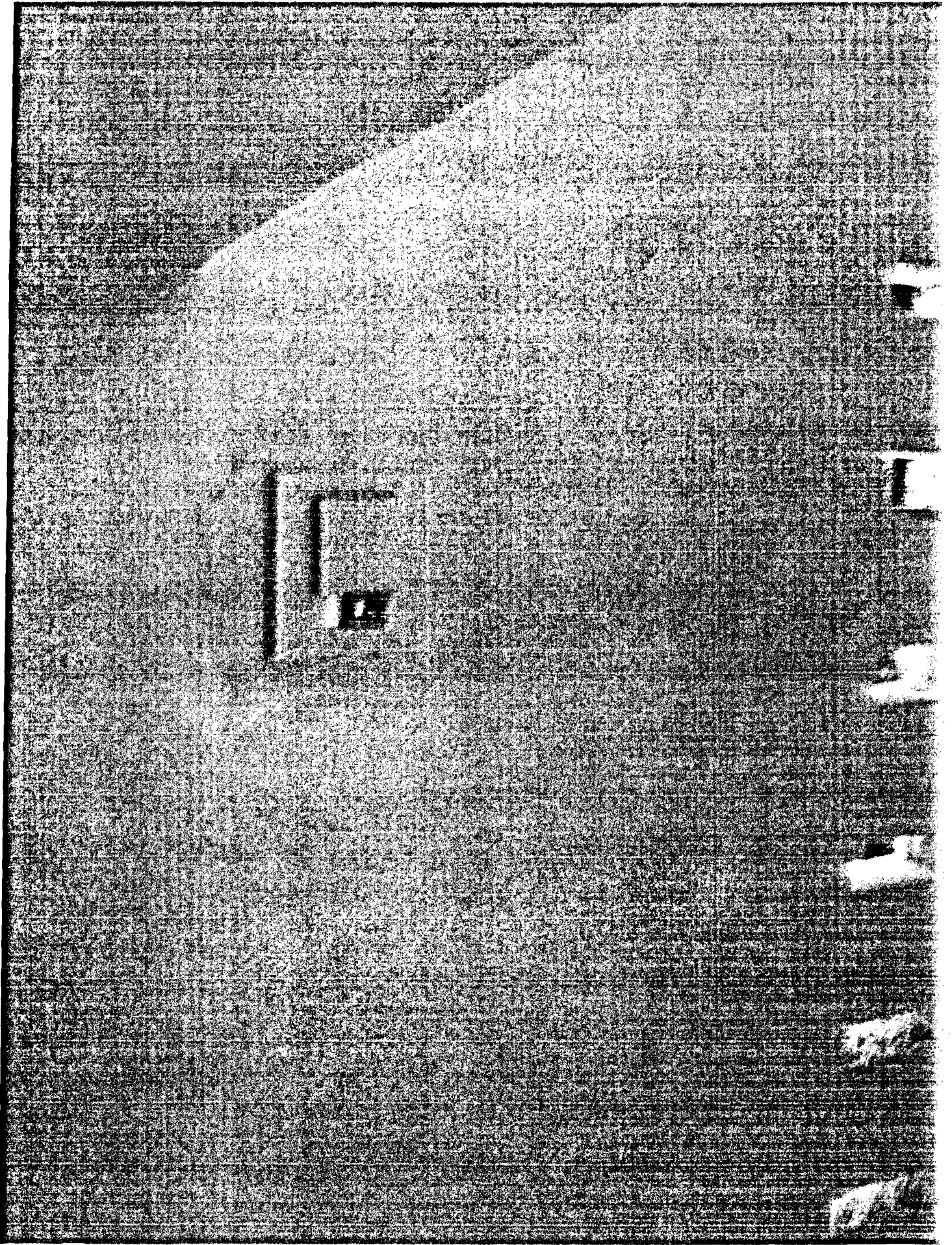


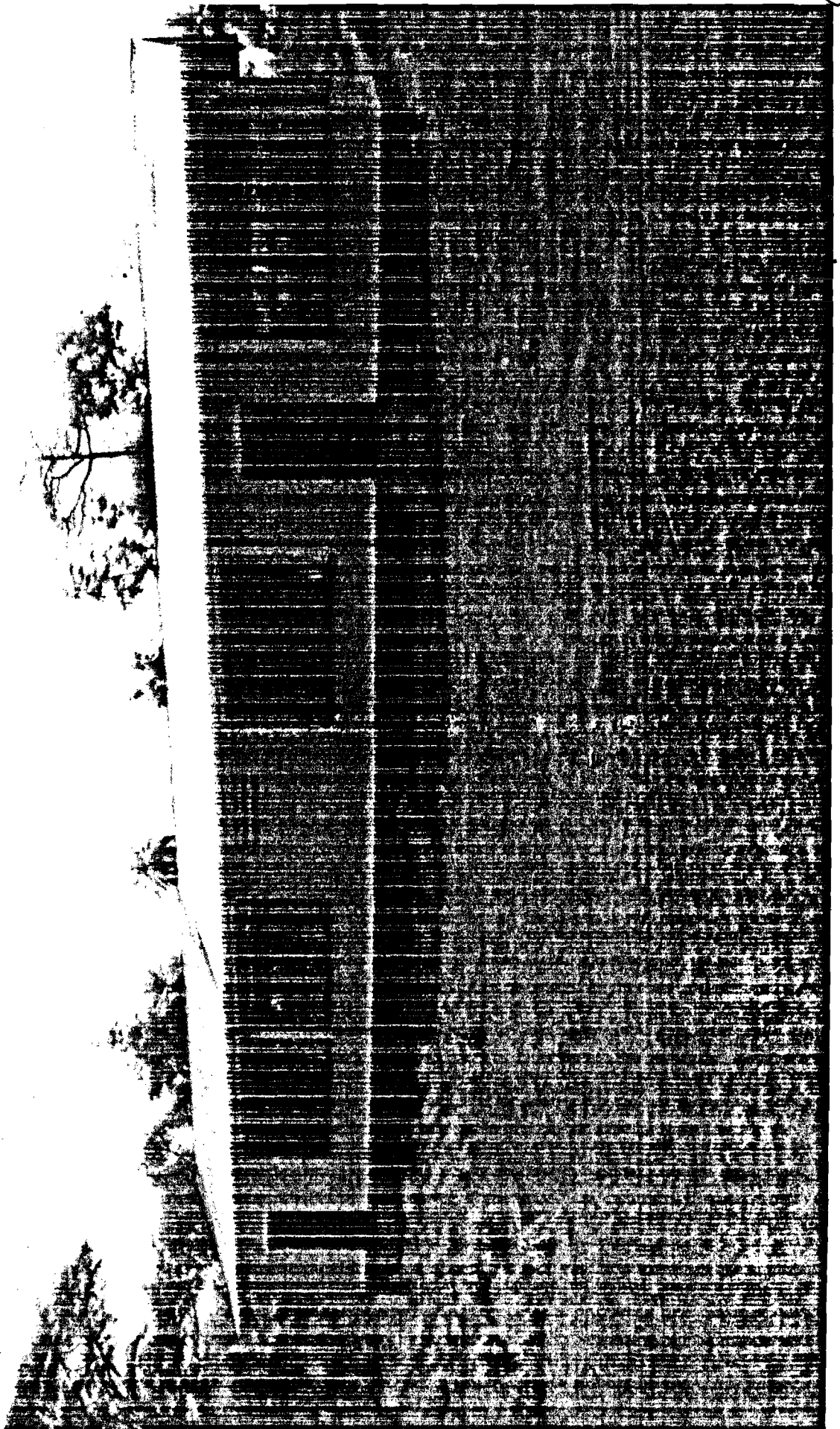


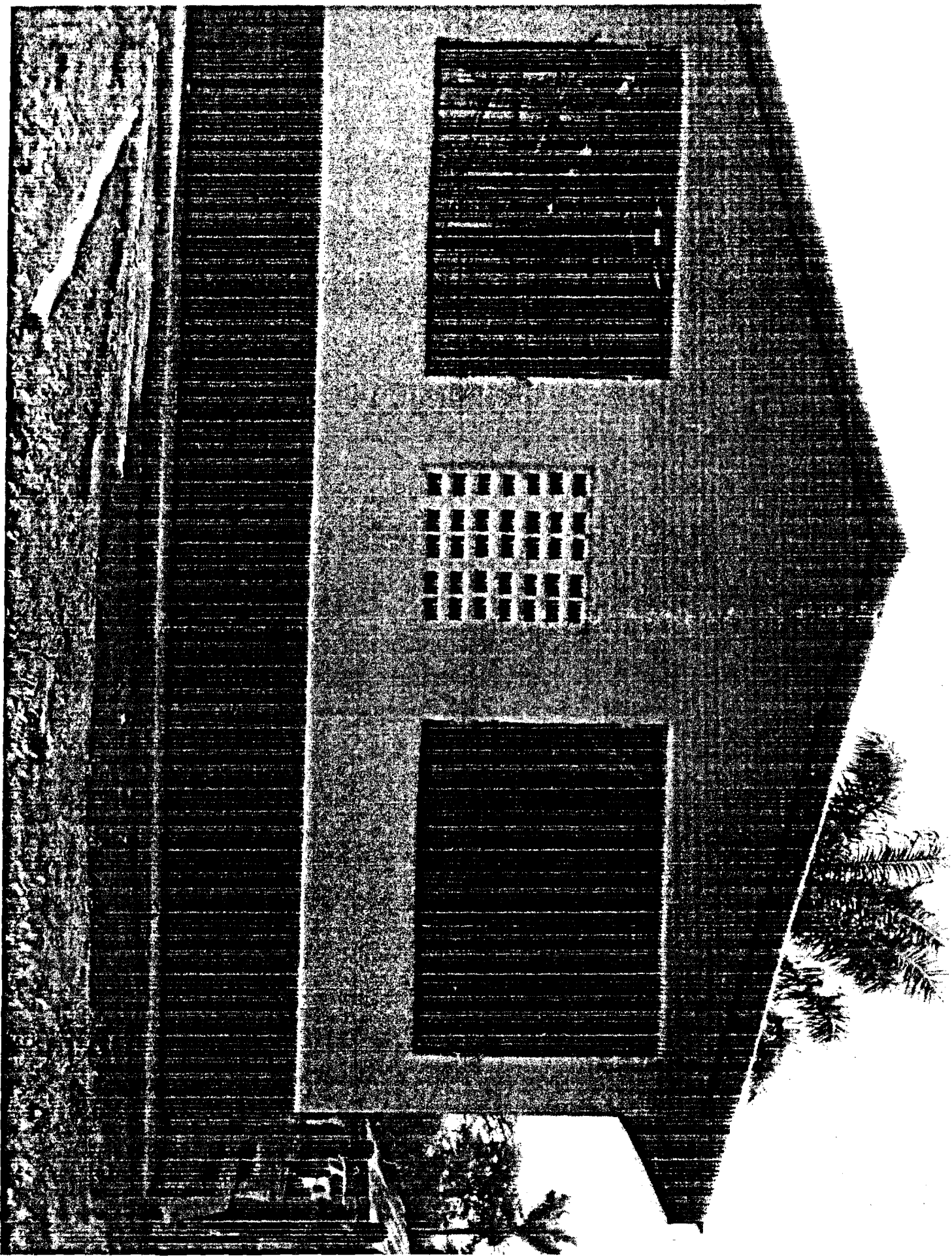


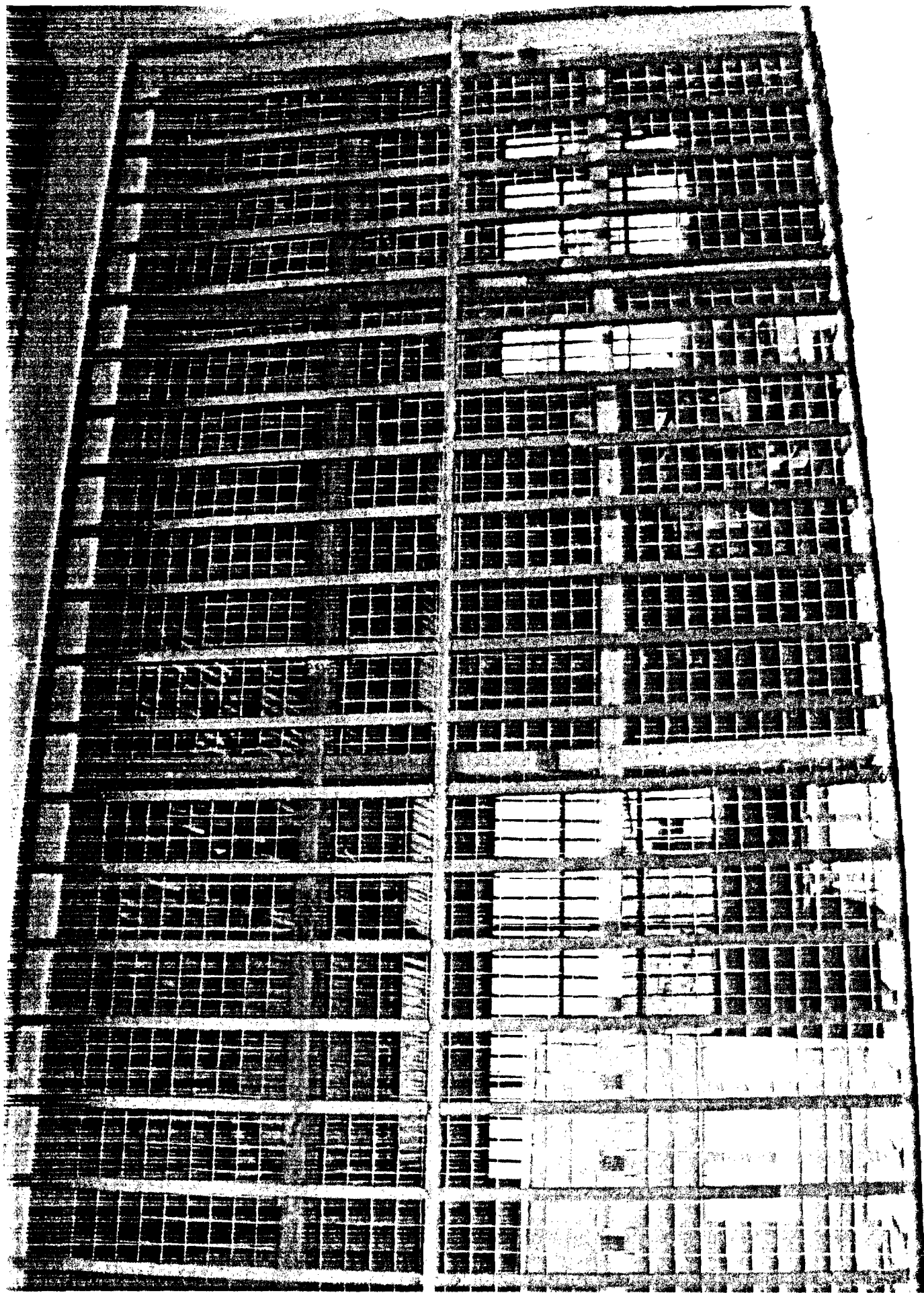


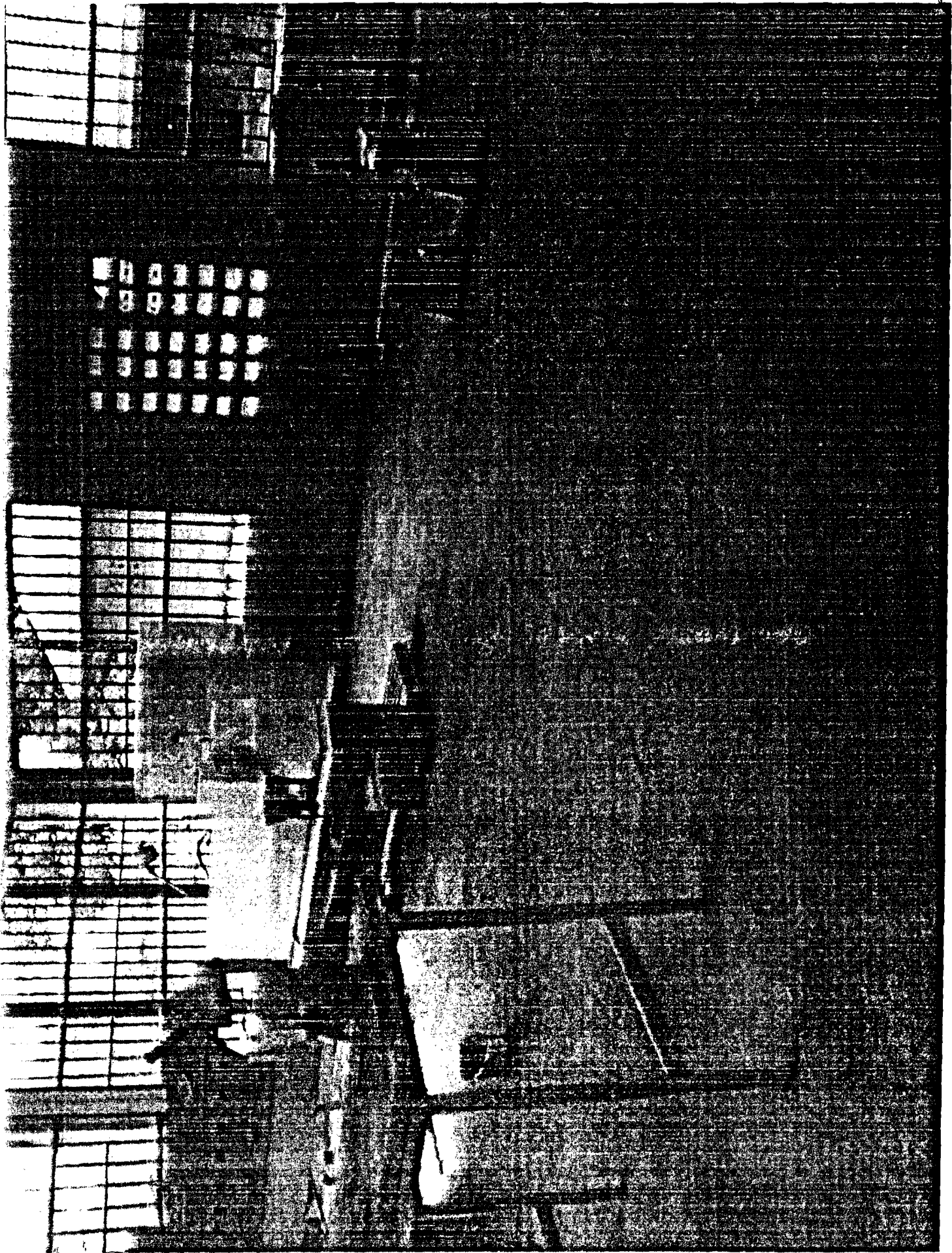


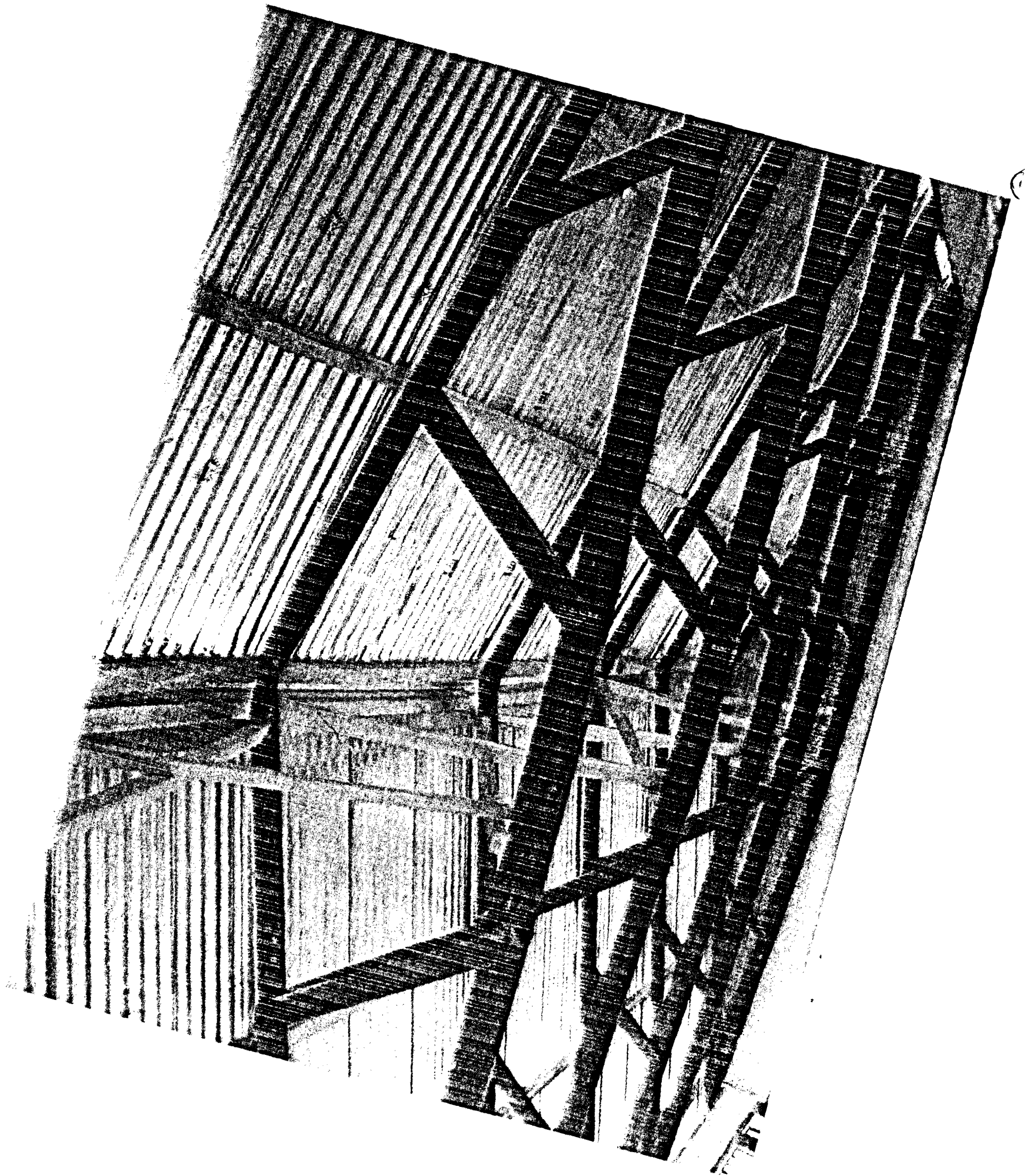


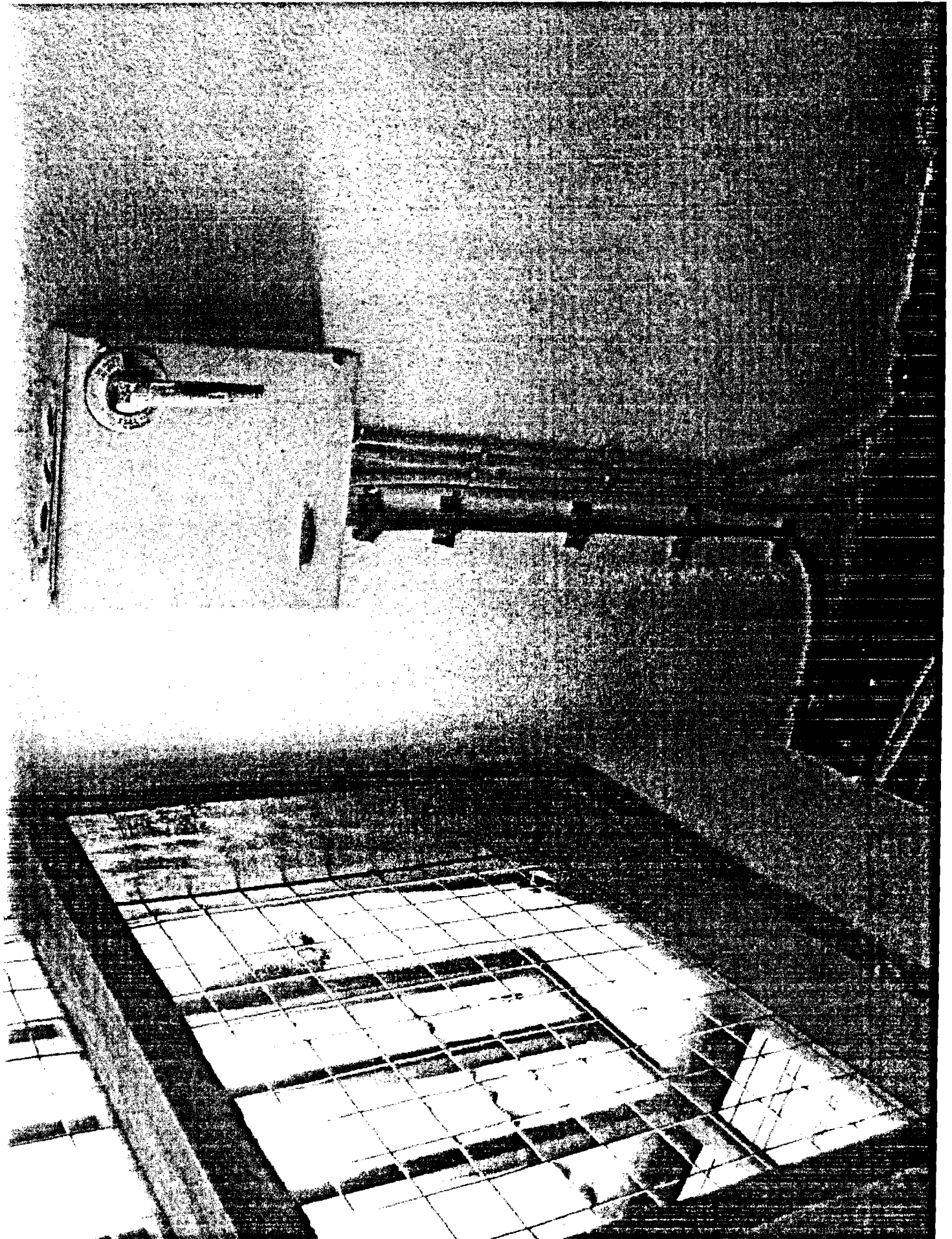


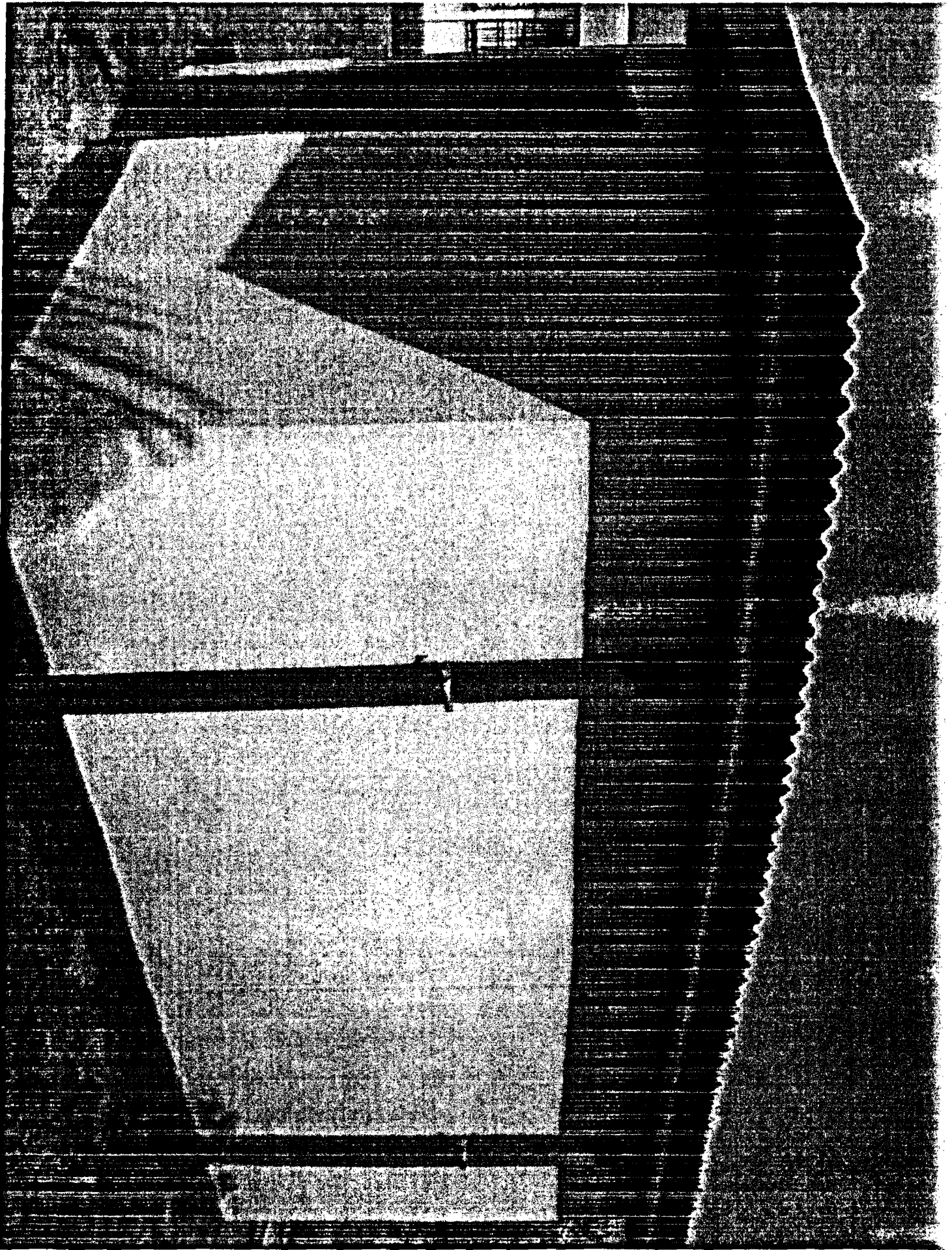


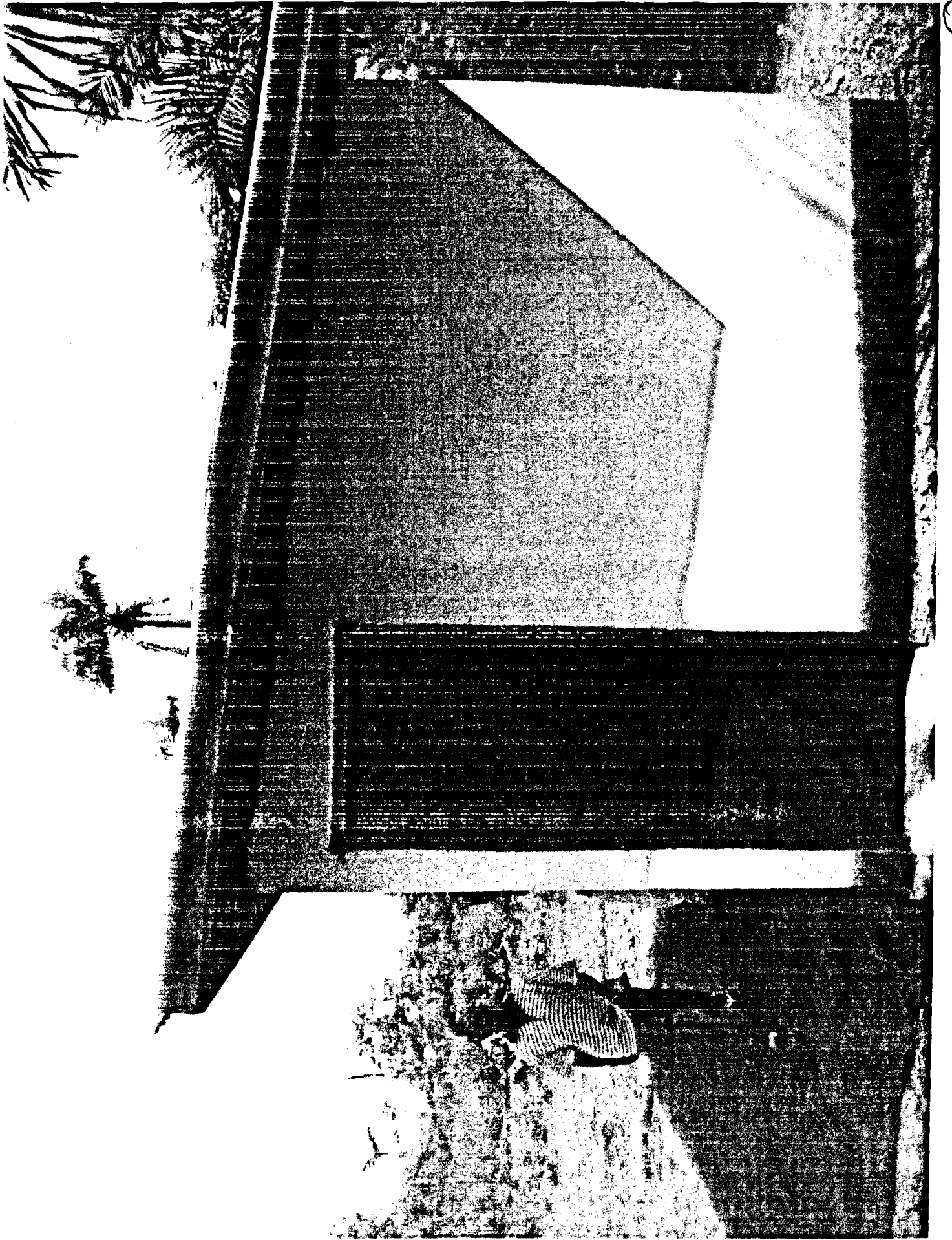


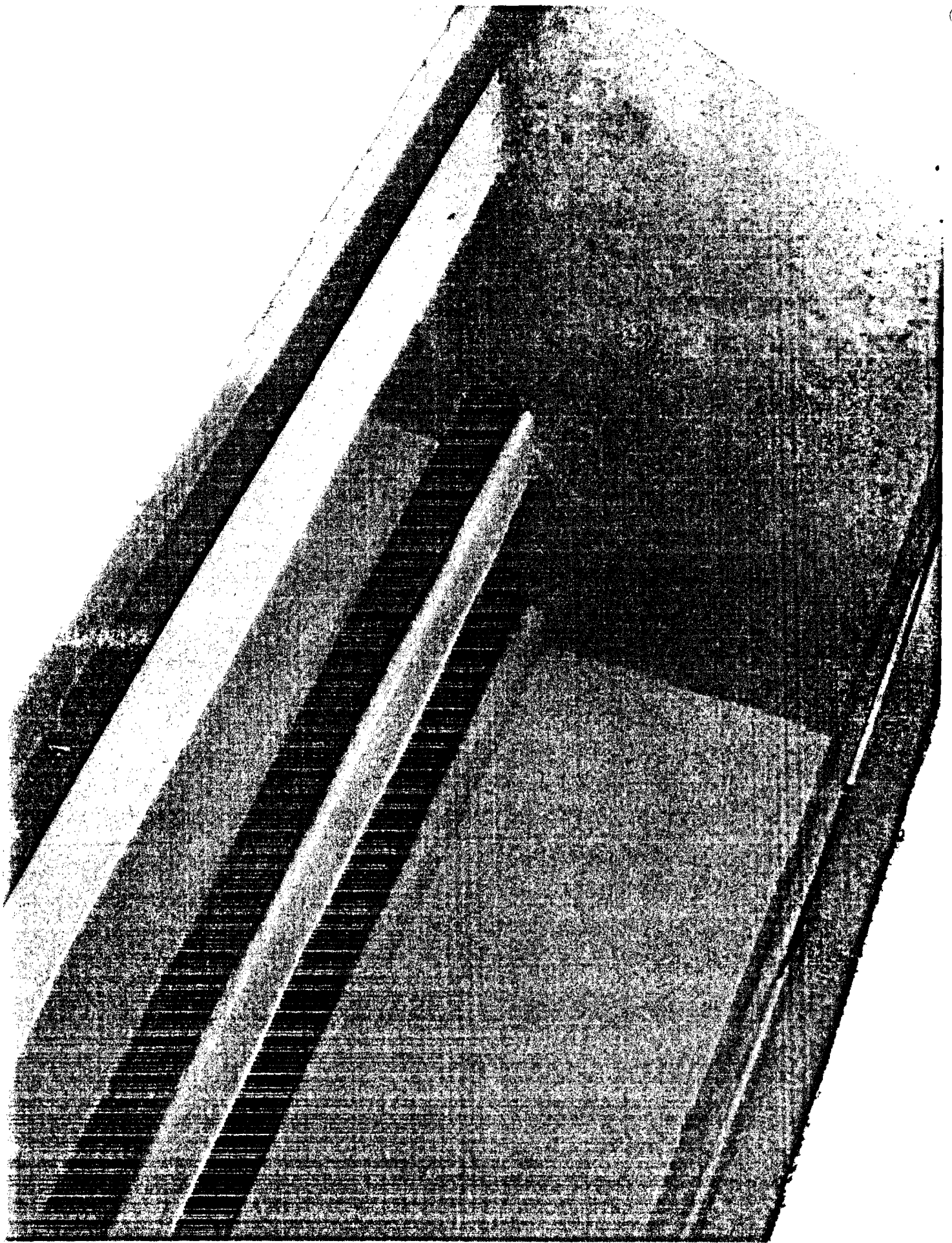




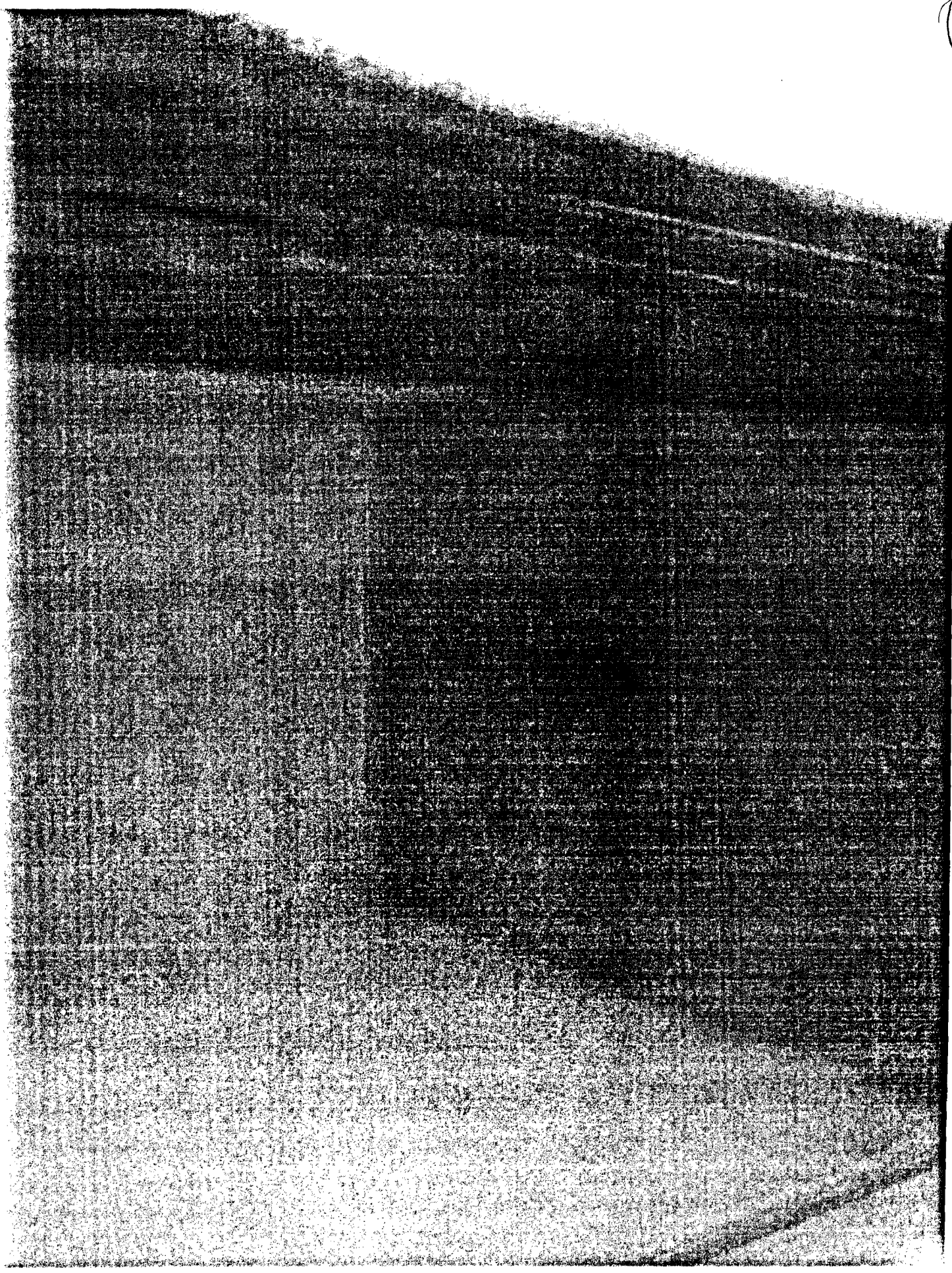








C.



(24)

MILLA
TANI



