

Artifacts of Val Cushing's Studio Pottery

3 of 5: Black Marble Notebook

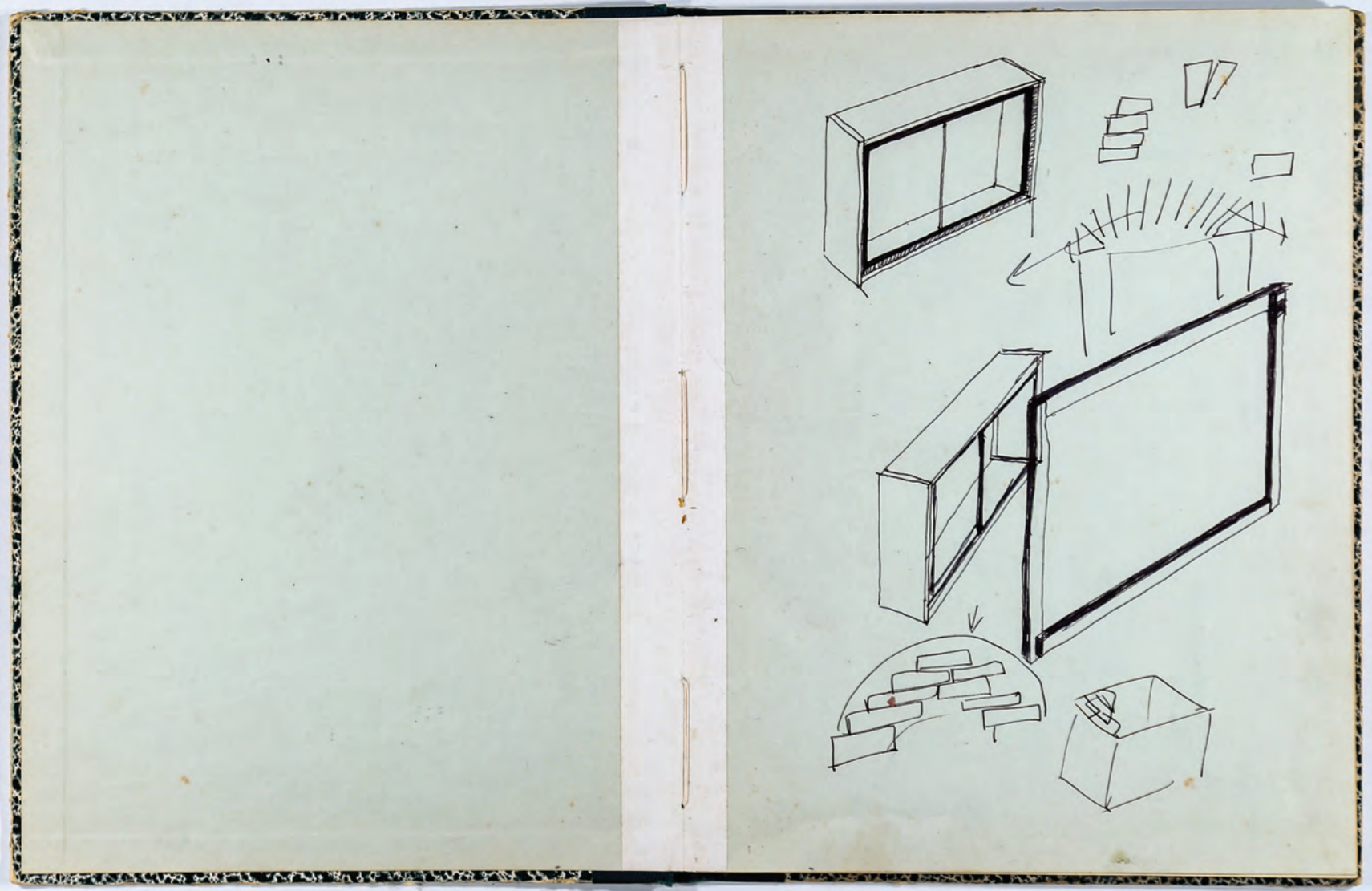
A collection of notebooks and tools from the studio practice of Val Cushing; these objects are documented as record of their exhibition at Scholes Library at Alfred University in 2019.

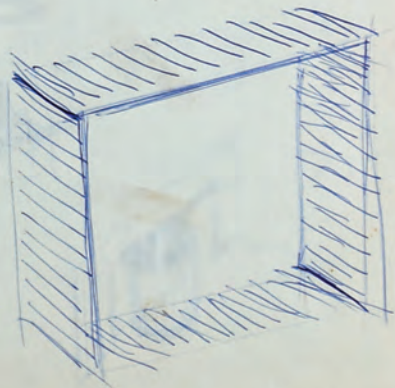
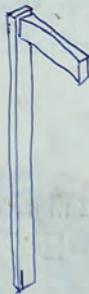
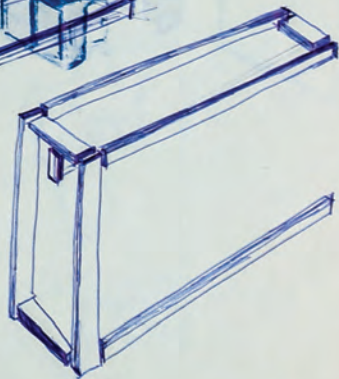
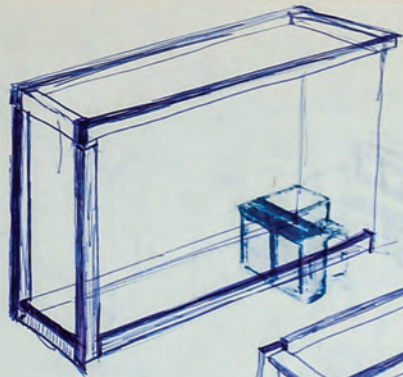
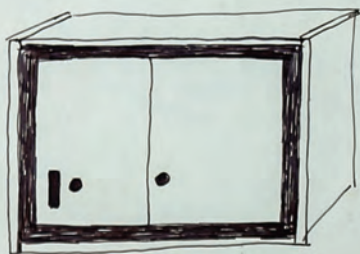
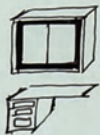
The exhibit showcased Grinding Room glaze research that was completed with the intention of creating a series of documents to augment the resources provided in the "Cushing's Handbook." These Visual Companions and other technical resources are available through:

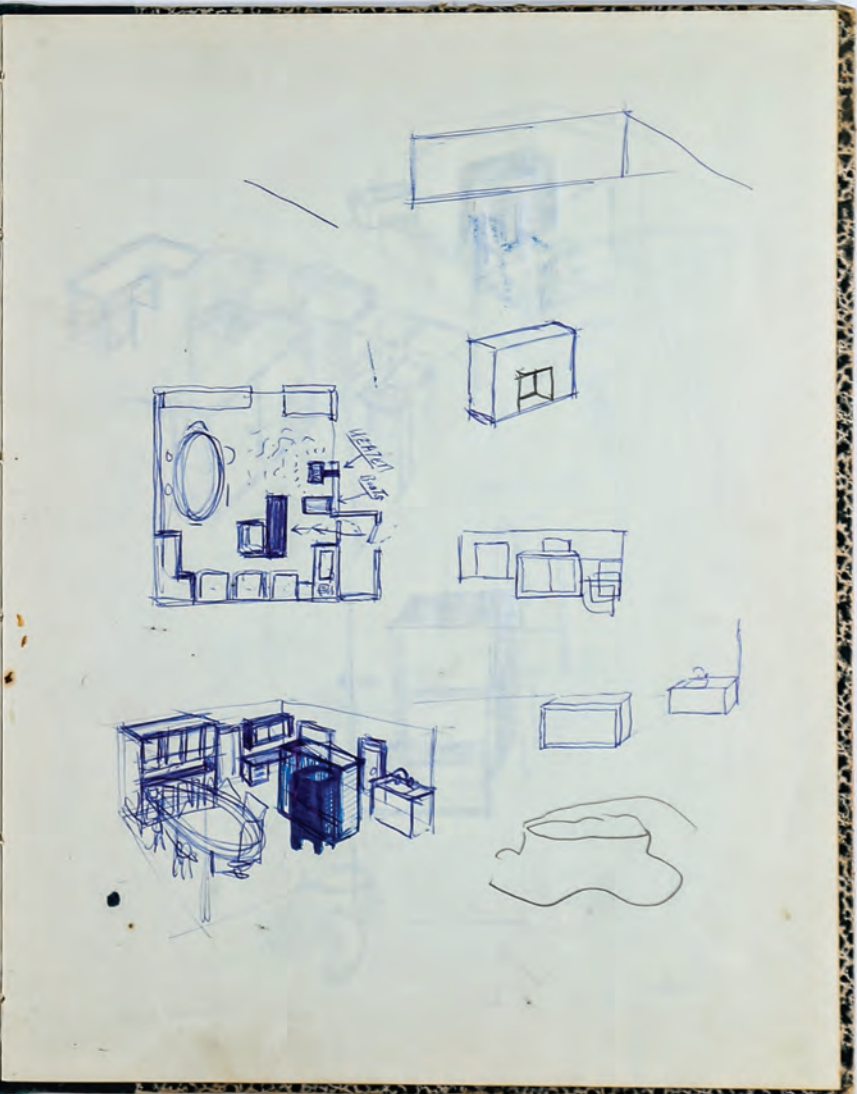
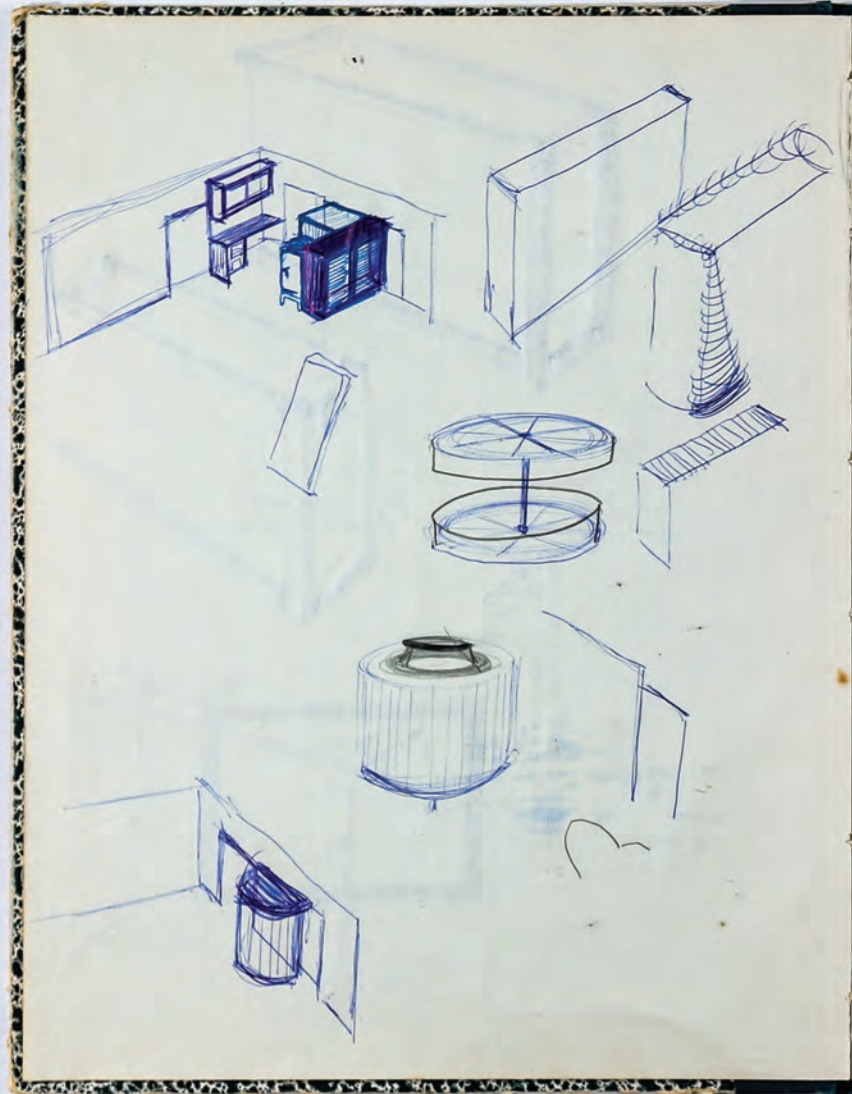
alfredgrindingroom.com

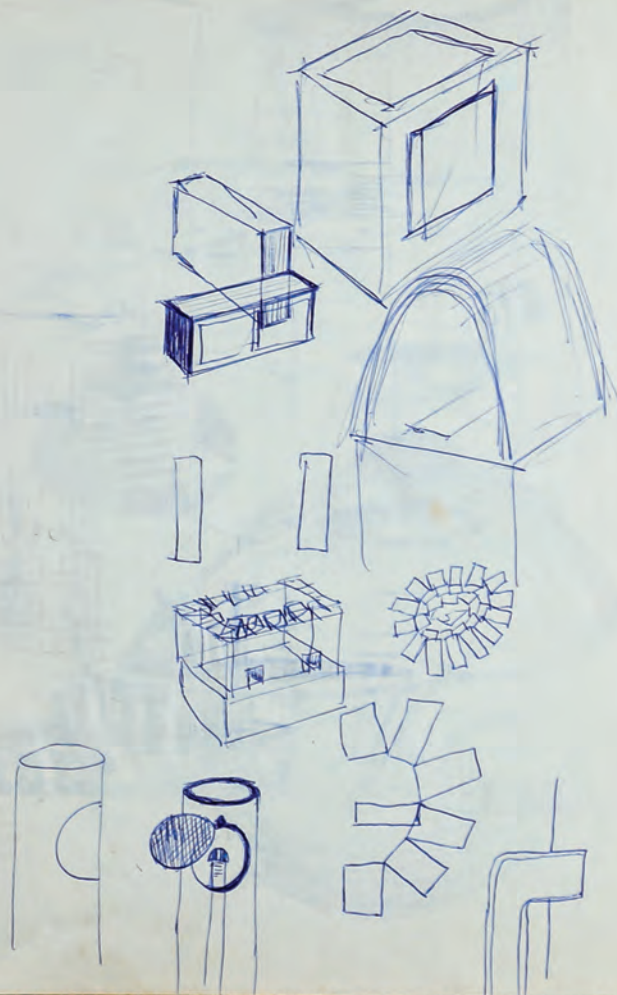
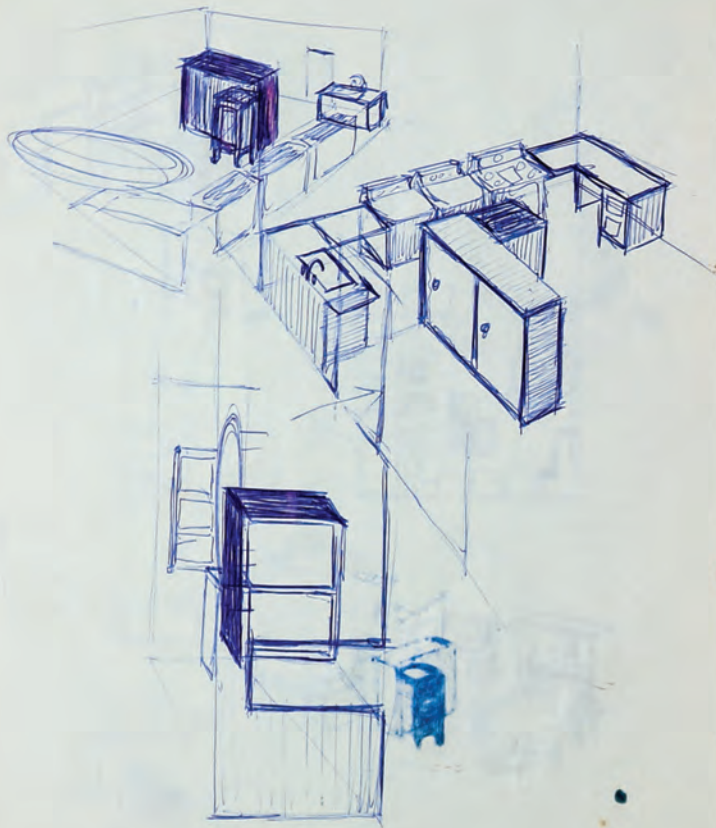
Made possible by Elsie and Eric Cushing's generous loan of Val's personal belongings.



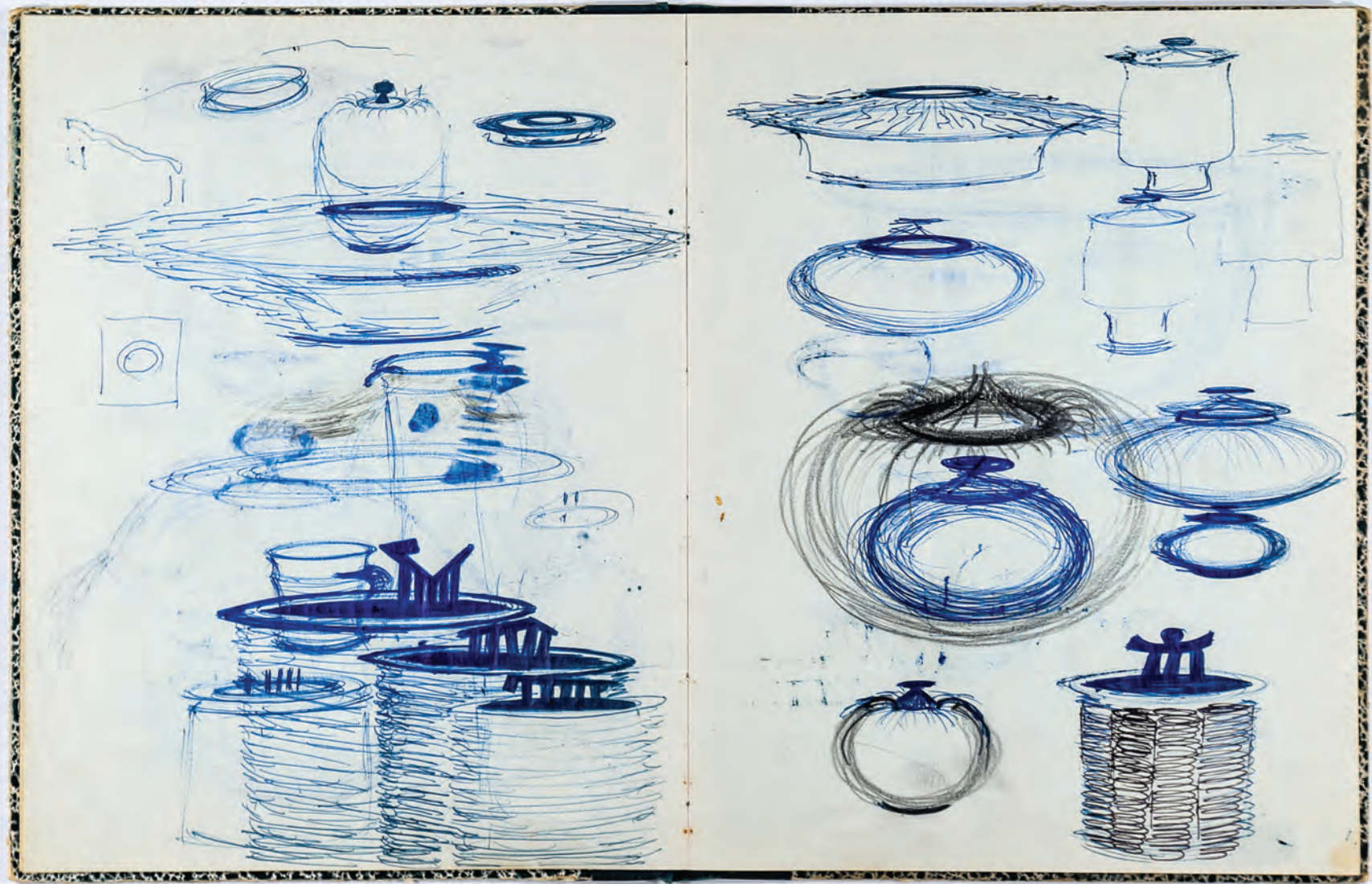


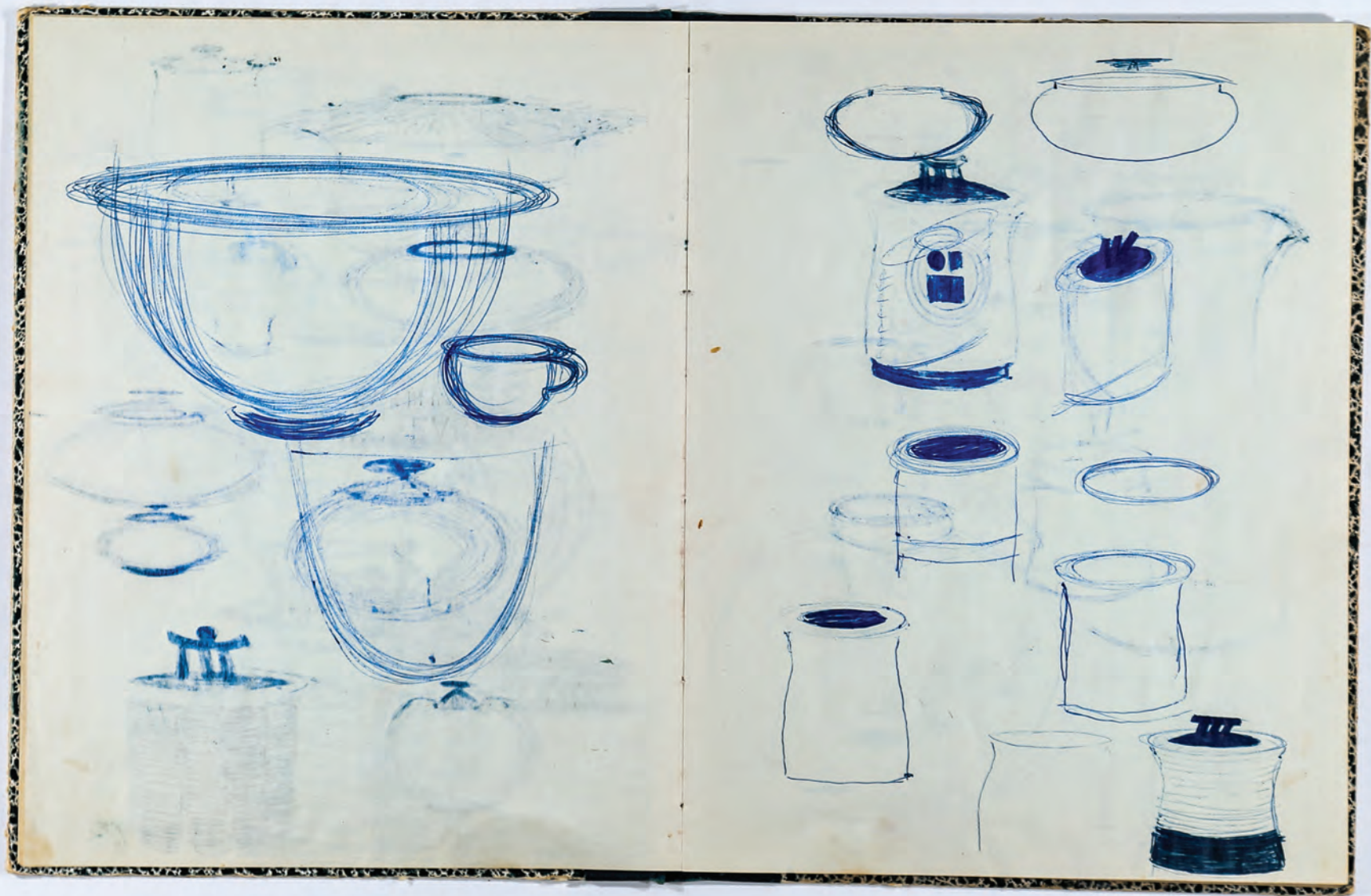


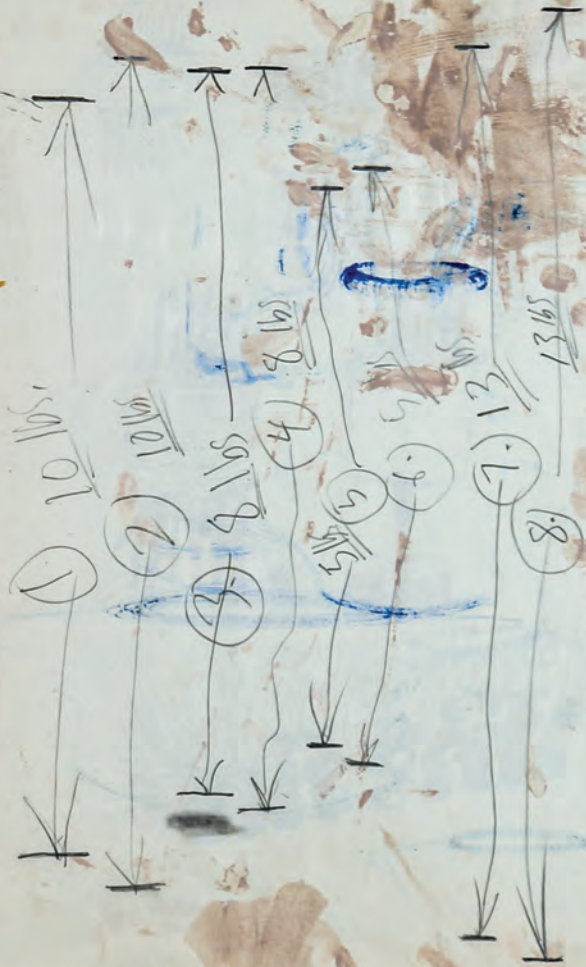


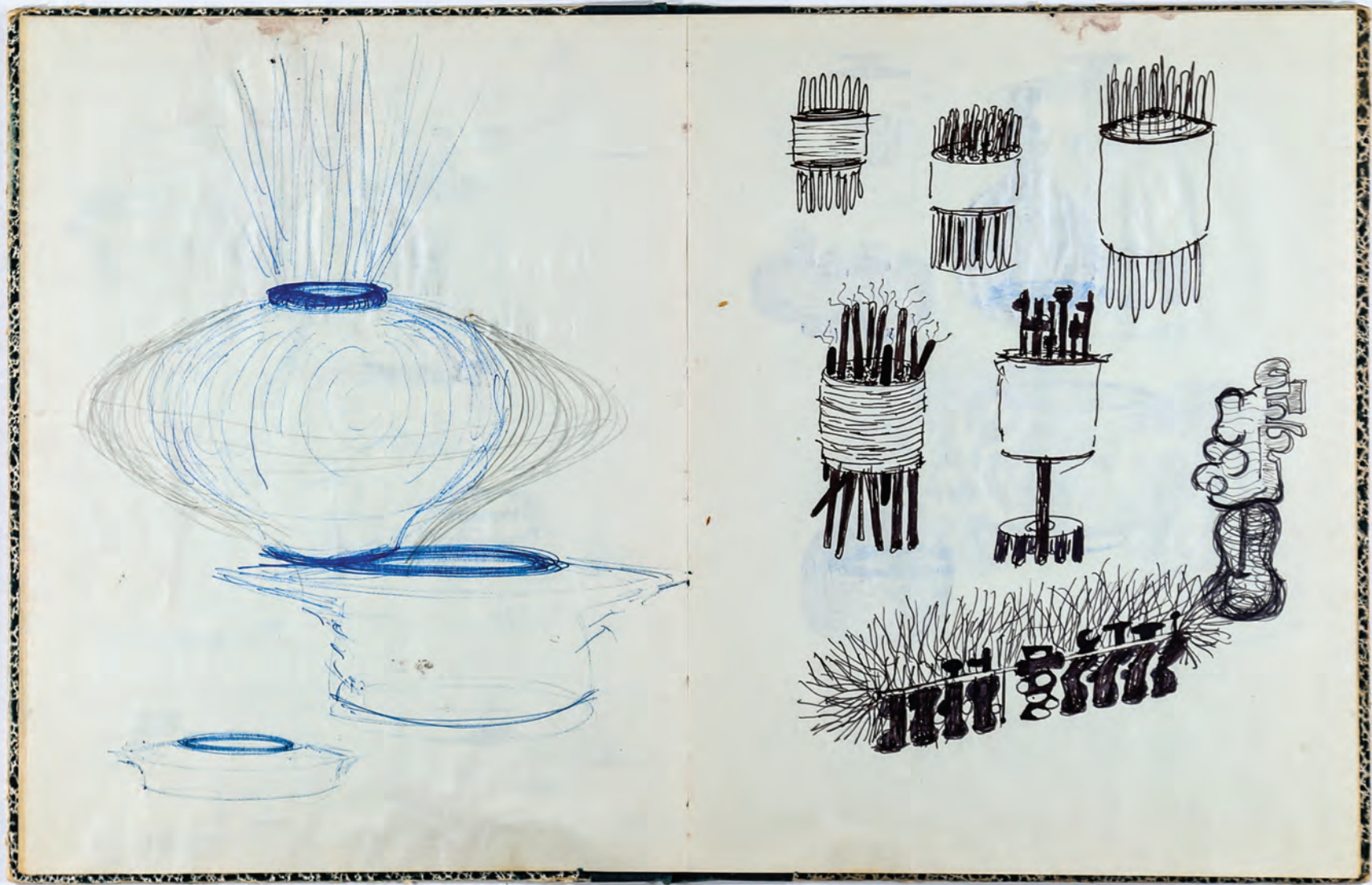


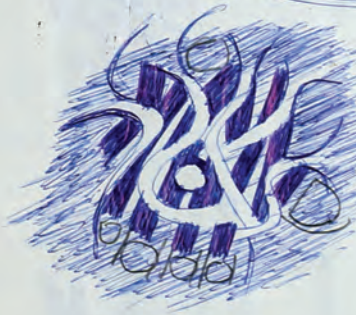


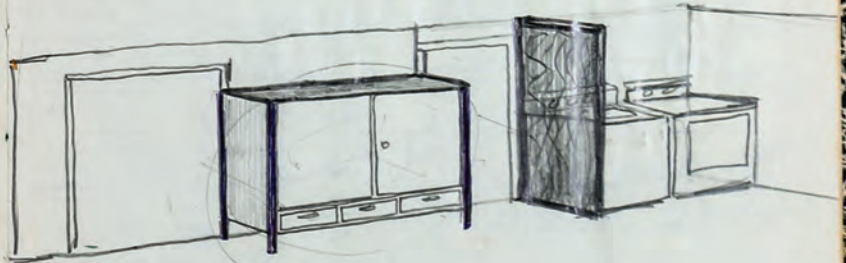
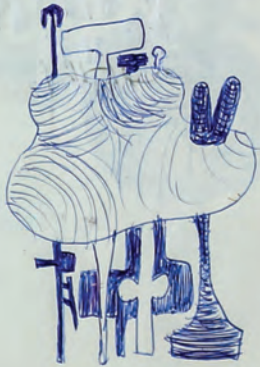
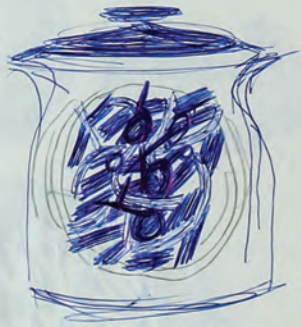


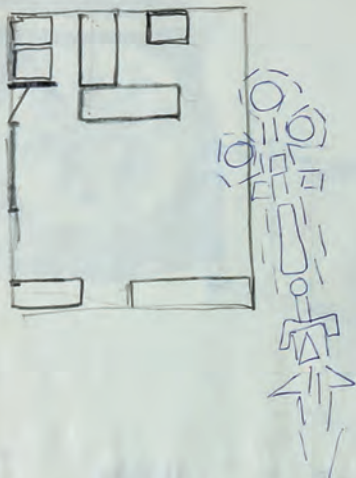












Dunt - hair line crack - firing fire quartz (frequency)
(more fire quartz in white bodies?)

- 1 α alpha - 573 \rightarrow inversion alpha 573 to beta inversion
 β beta - 870 \rightarrow conversion beta 870 to tridymite conversion
 - 2 Quartz to tridymite - conversion (takes time must some according to time)
 - 3 Tridymite to cristobalite 1470°C
- Quartz \rightarrow liquid 1713°C all these are polymorphic in clay (always alpha) morden form

Feldspars

Quartz Remn.

Silica lost to crystalline on earths crust
the structure of feldspar is almost the same as silica
 $K(AlSi_3)O_8$

MINERALS IN FELDSPAR mostly from New England (-N.C. & Tenn.)

	SiO ₂	Al ₂ O ₃	CaO	K ₂ O	Na ₂ O
ORTHOCLASE	64.7	18.4		16.9	
K MICROCLINE	64.7	18.4		16.9	
Na ALBITE	68.7	19.5			11.8
Ca ANORTHITE	43.2	36.7	20.1		

} Different structure

PLAGIOCLASE \rightarrow mixture of albite & anorthite \rightarrow (solid solution) (CRYSTAL GROWTH)

ANDESINE	55.4	28.5	10.4		
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ANORTHOSITE $\frac{1}{2}$ ALBITE
 (ADIRONDACK MTS.) $\frac{1}{2}$ ANORTHITE

ion-free silica & magnesium - impurities in feldspar.
 $\frac{1}{10}$ a whiteware body

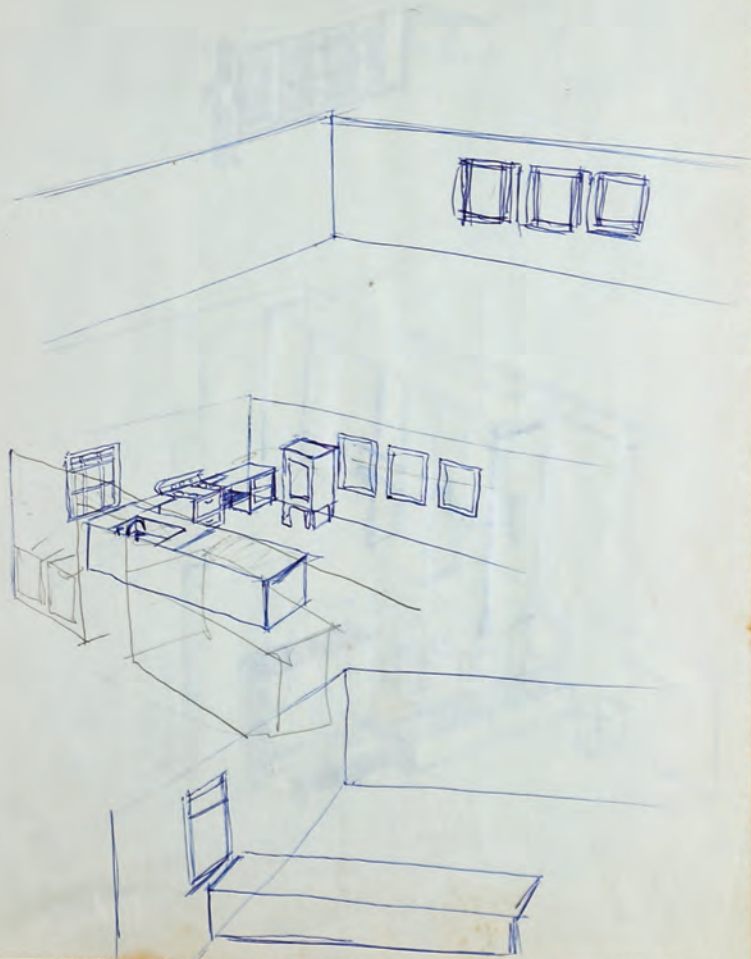
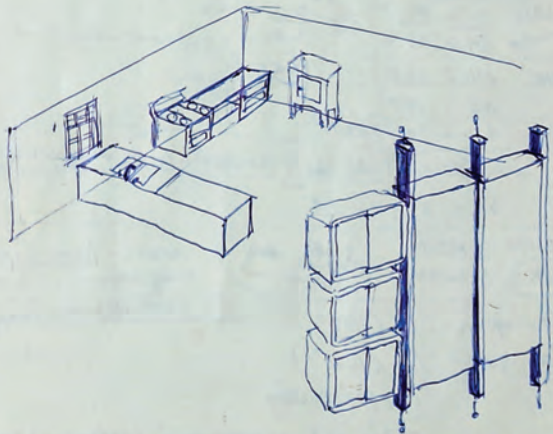
High Na spar - $\frac{1}{14}$ (1165°C)

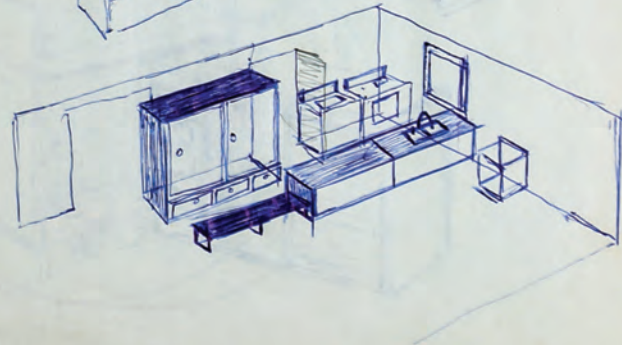
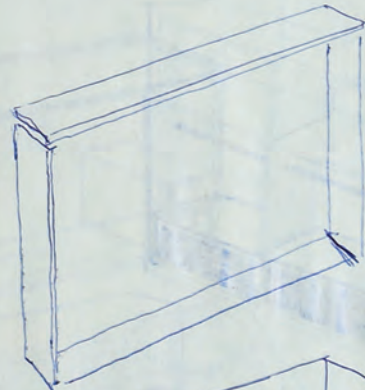
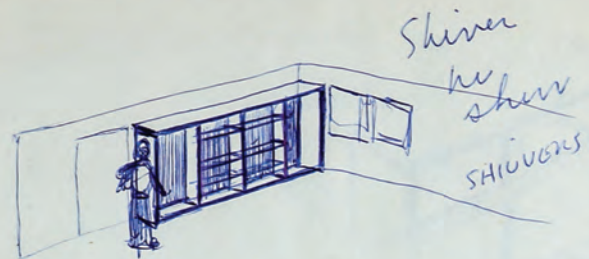
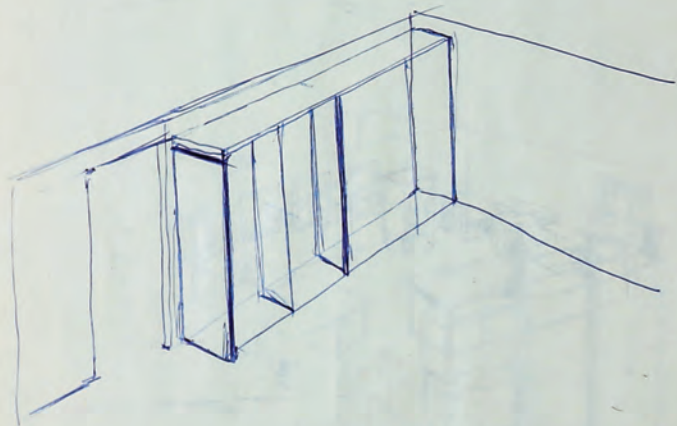
High Ca. spar - $\frac{1}{10}$ (1260°C)

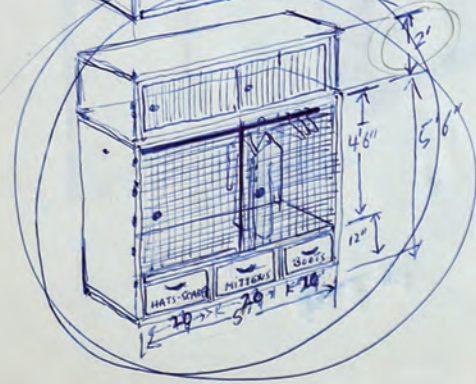
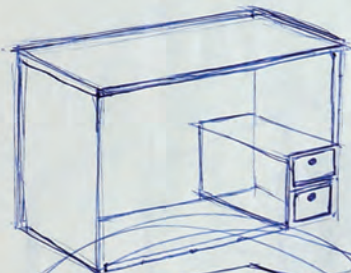
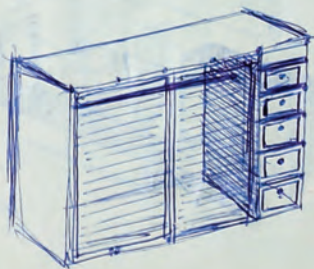
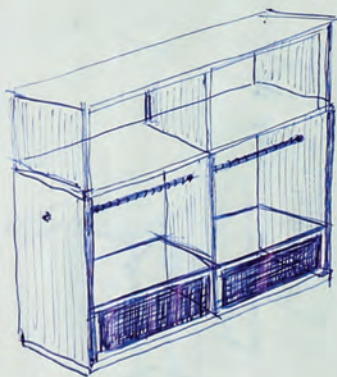
over. $\frac{1}{8-1}$ (1275-1250°C)

feldspar increases thermal expansion (alkalic) creates high strength - decreases porosity (gives dry strength reduces dry shrinkage) increases translucency - viscosity of a Potash spar is less than a sodium spar.

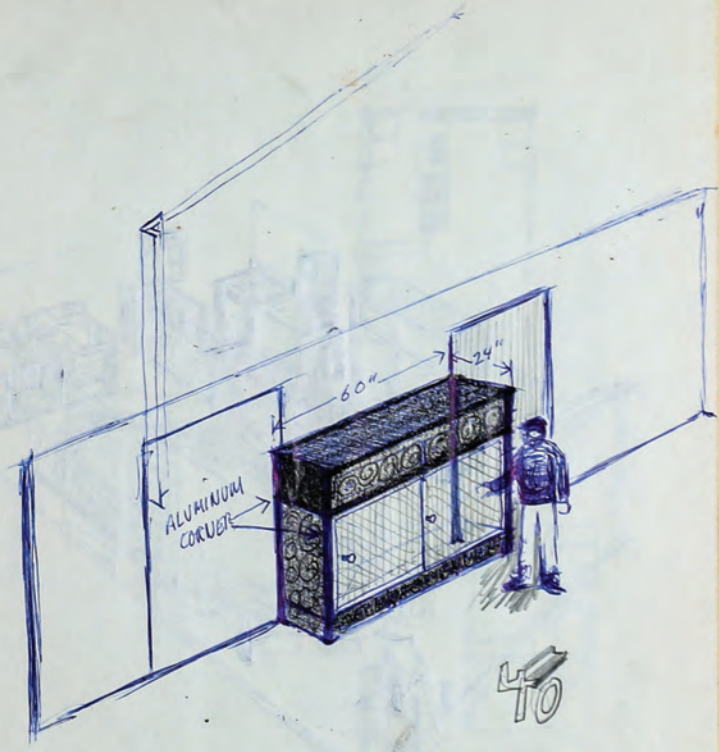
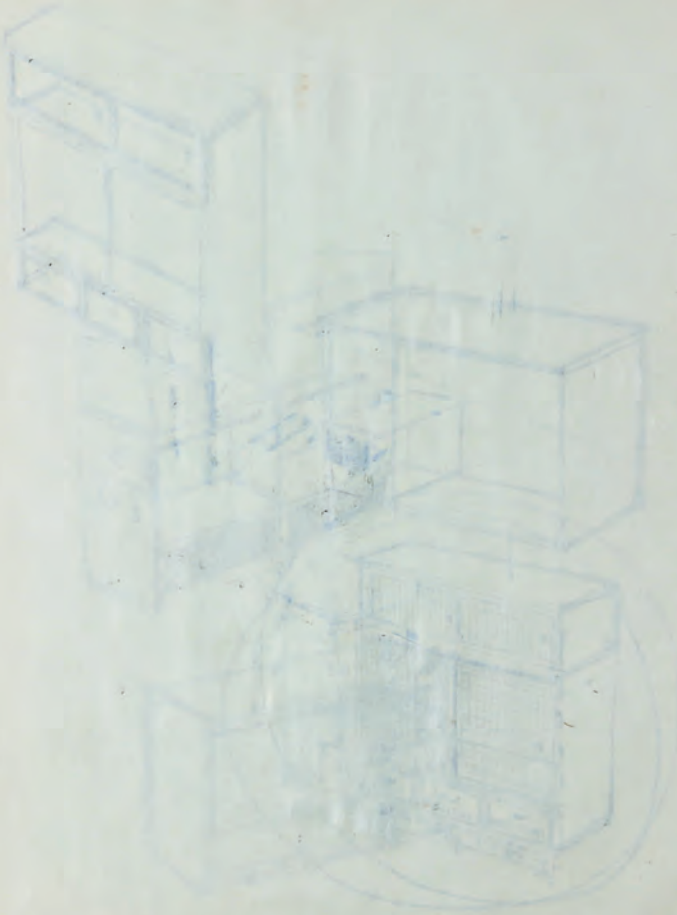
(Handwritten notes, likely bleed-through from the reverse side of the page, including the word "Project" and various illegible phrases.)

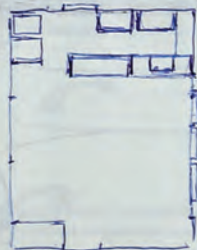
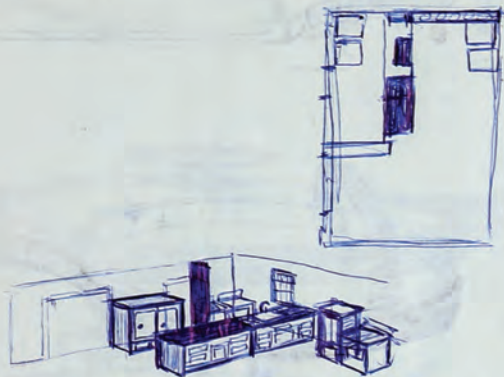
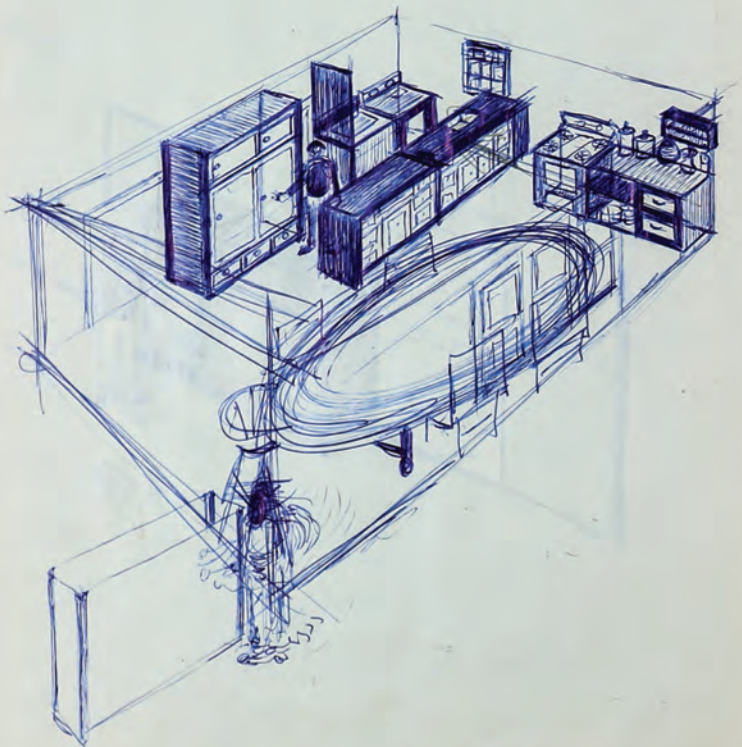


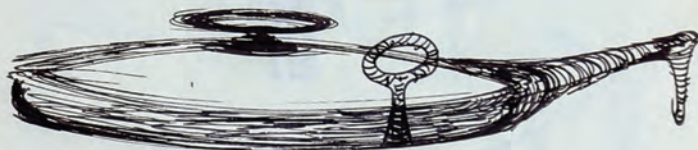
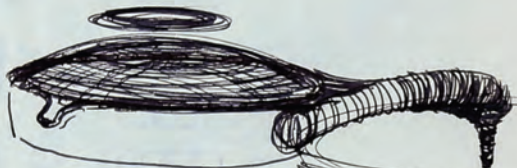
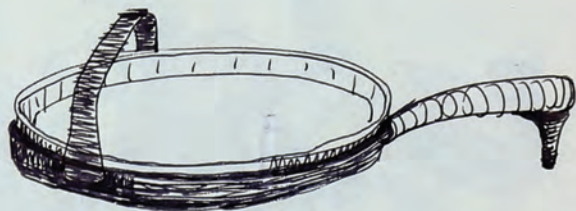
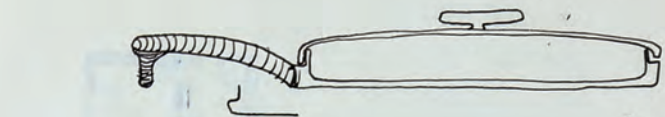


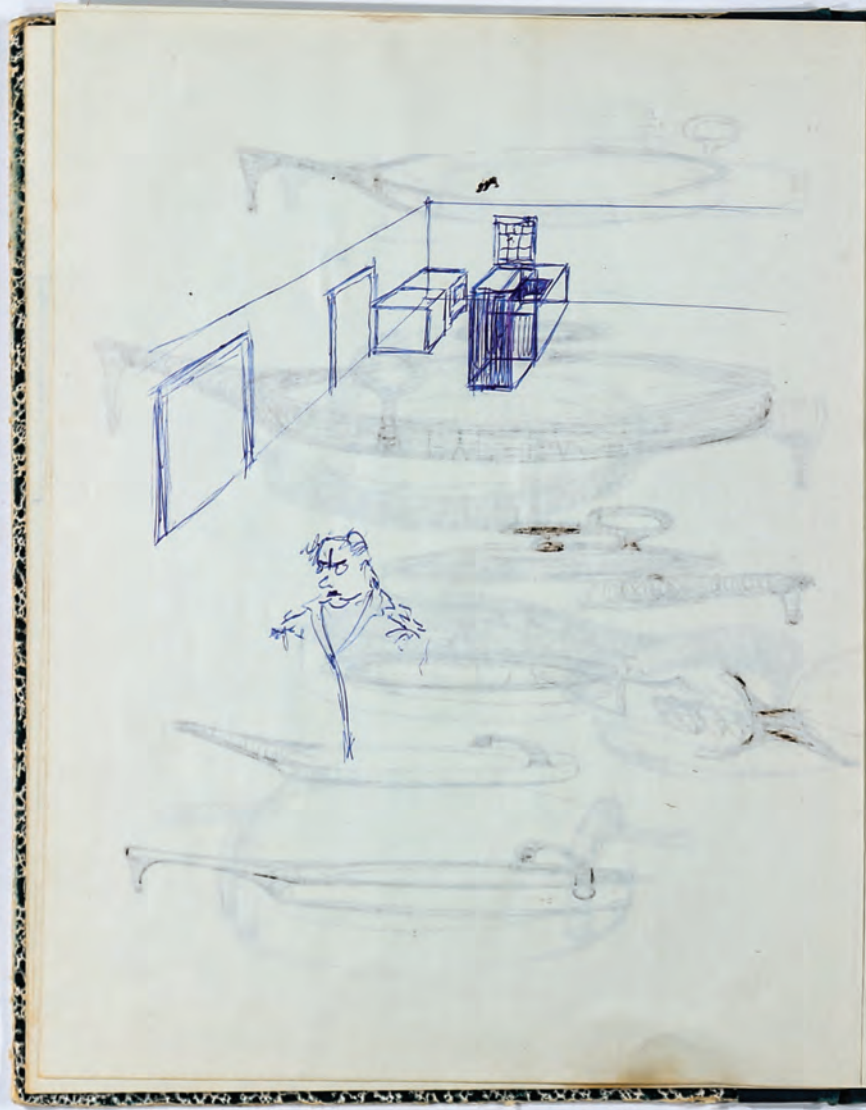


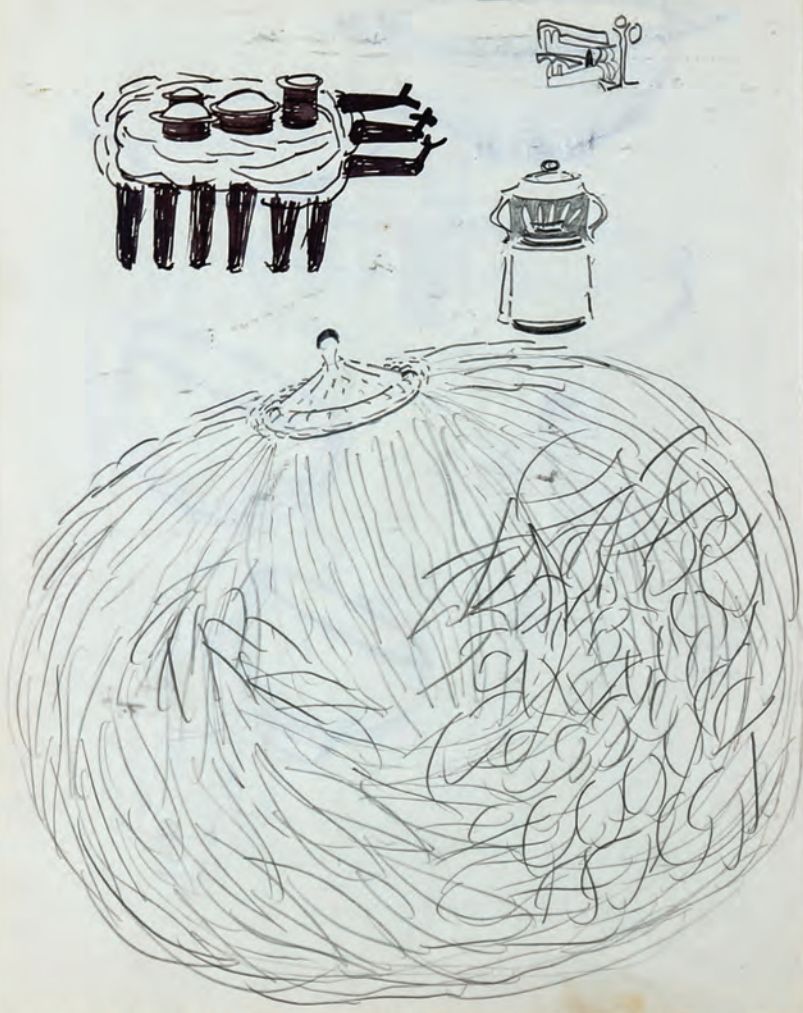
20
3 | 60









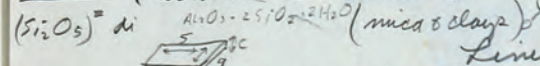


① Clay Water Systems W. Brownell

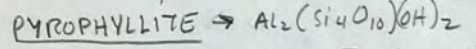
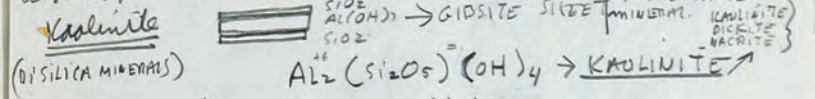
struct. - size and shape of clay particles:

increases strength on drying; less plasticity - clay is quite different than most minerals.

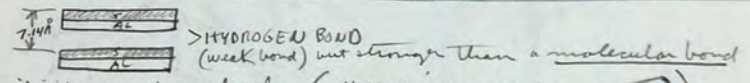
Silicates: silicon surrounded by 4 atoms of oxygen. (Tetrahedral structure)



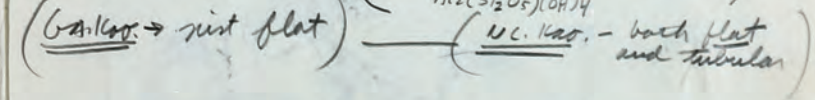
Aluminum - silicon & oxygen structures less a common atomic plane dimension of similarity - Lines pulling



Kaolinite is a more random structure etc.



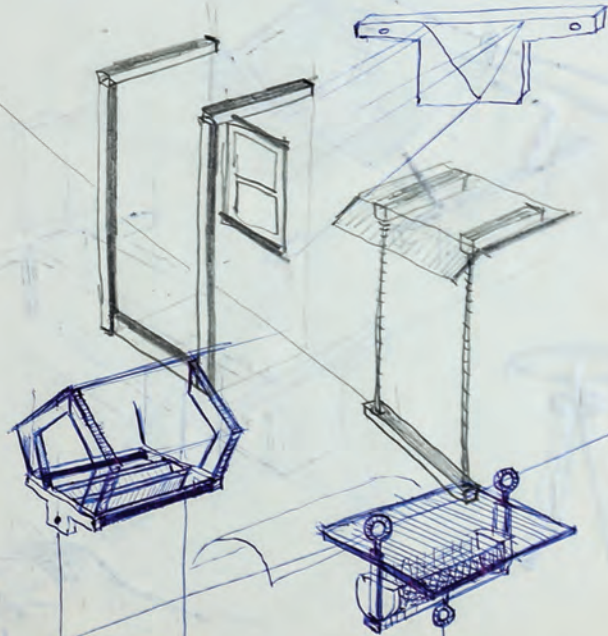
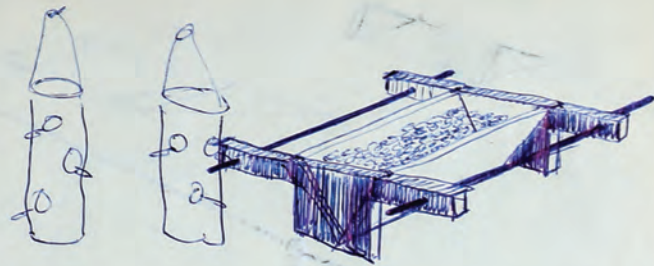
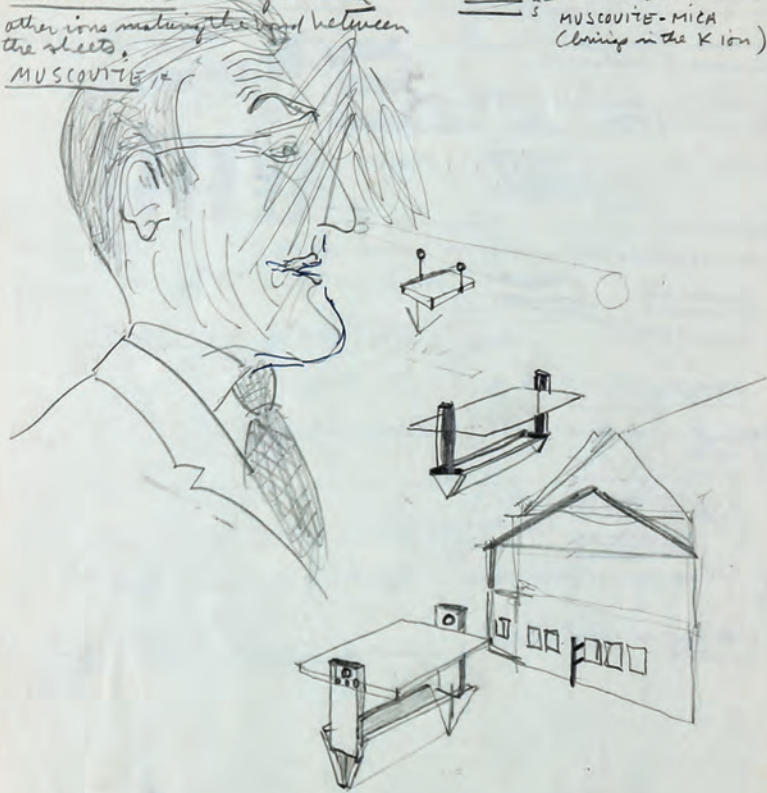
silicates are not molecules. (HALLOYSITE \rightarrow tubes)

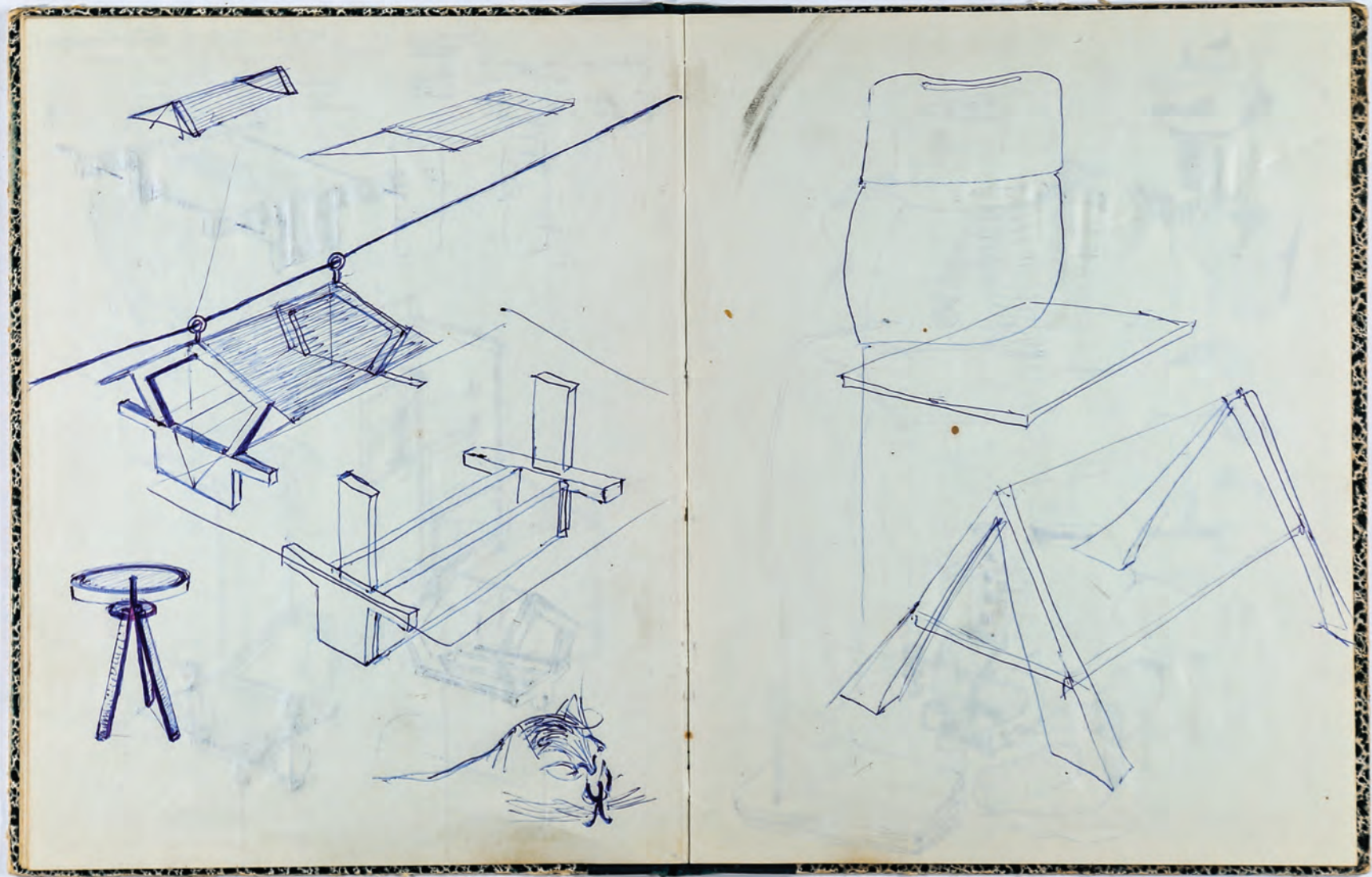


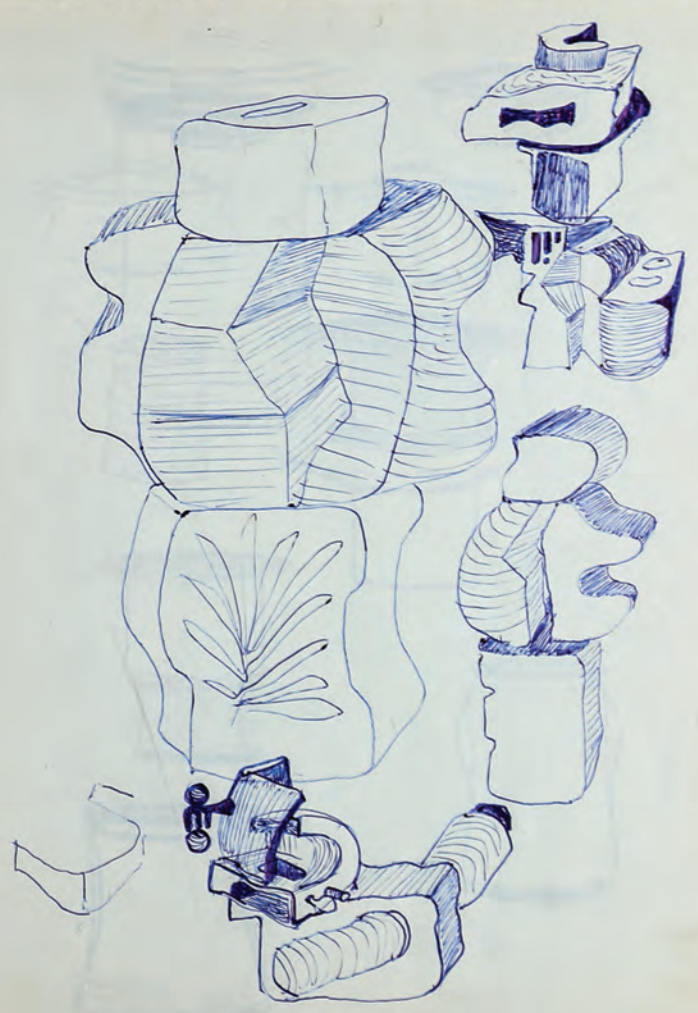
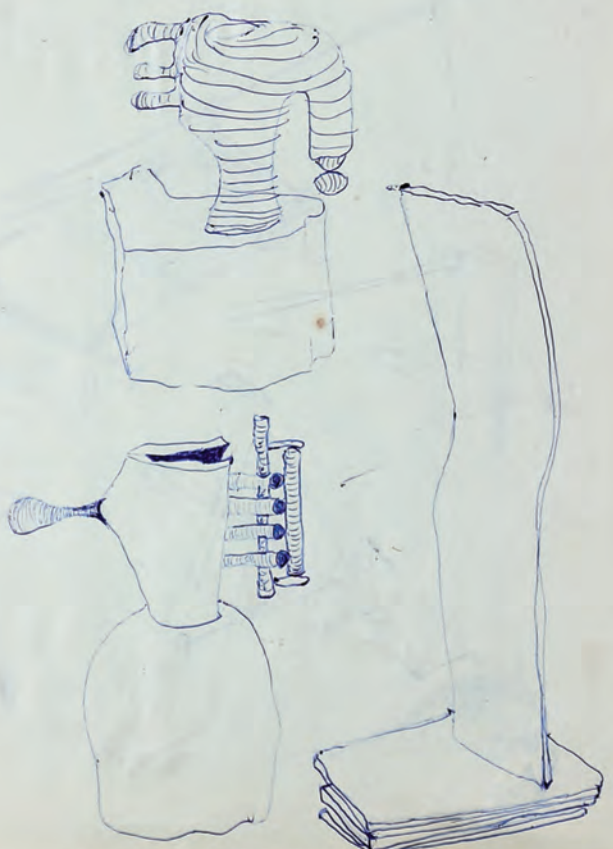
Opalphyllite - $Al_2(Si_4O_{10})(OH)_2$

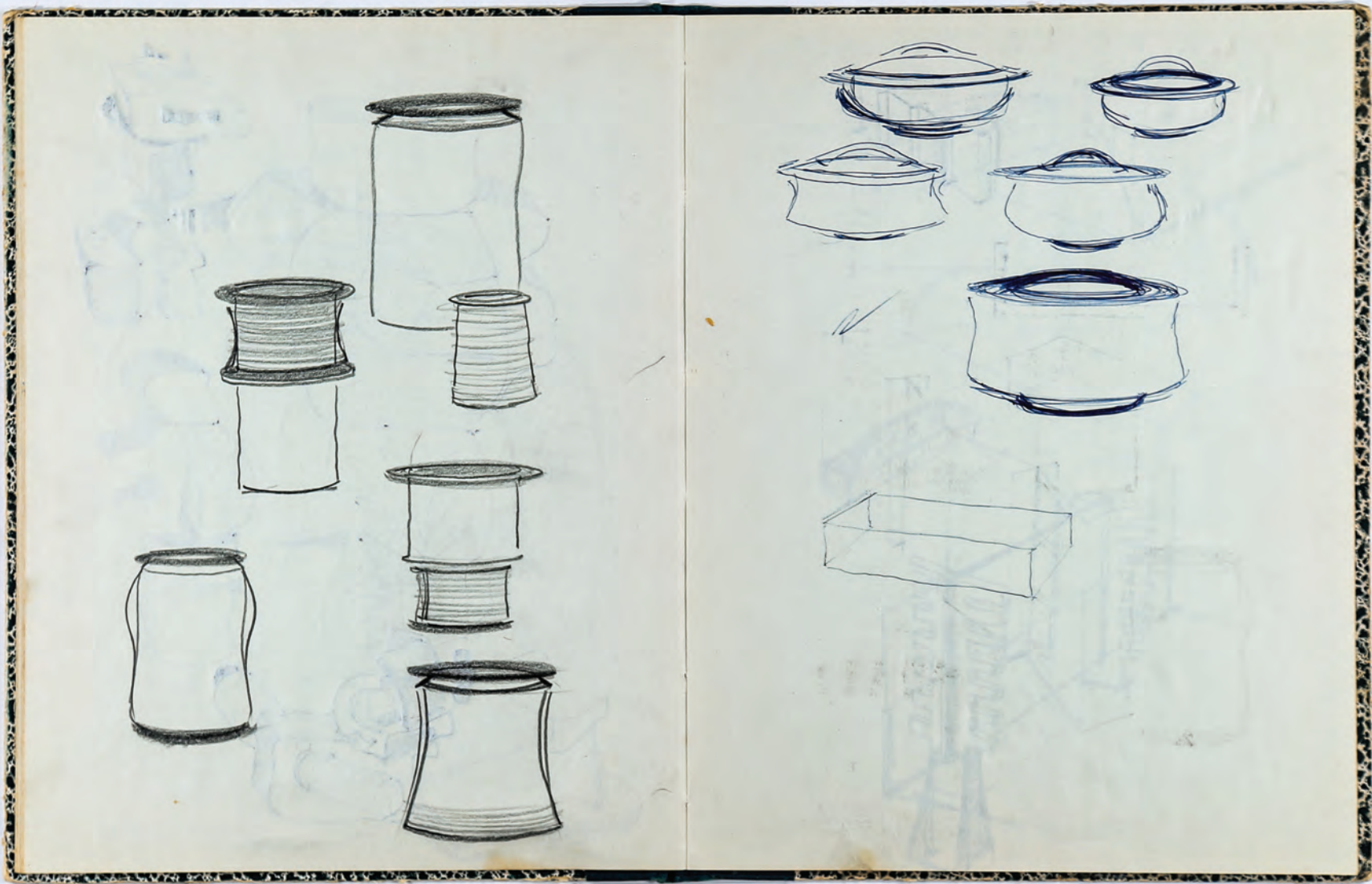
MONTMORILLONITE - clay mineral
other ions making the bond between
the sheets.
MUSCOVITE -

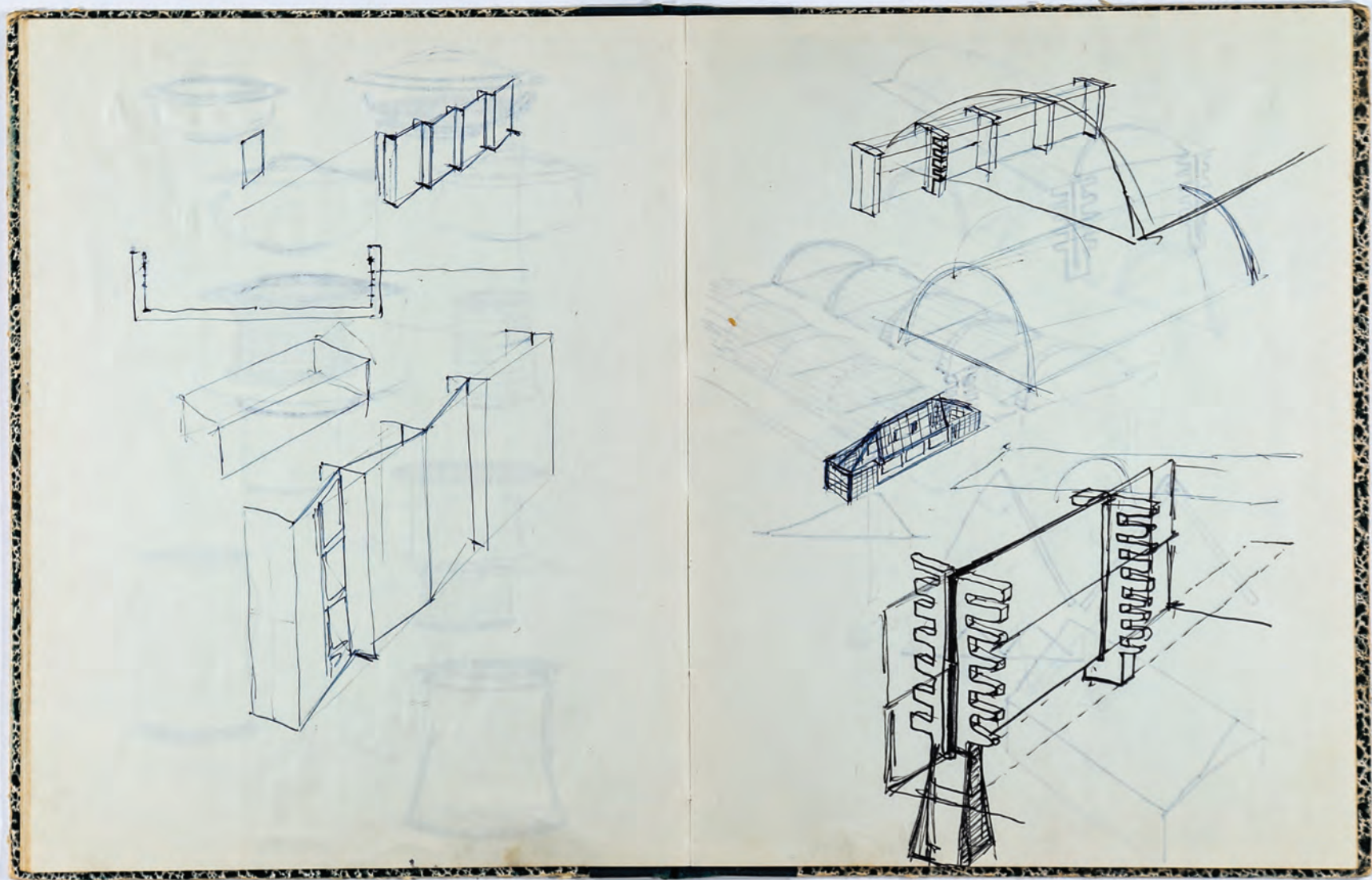
=====
F AL
C potassium ion completing
the charge,
=====
S MUSCOVITE - MICA
(locking in the K ion)

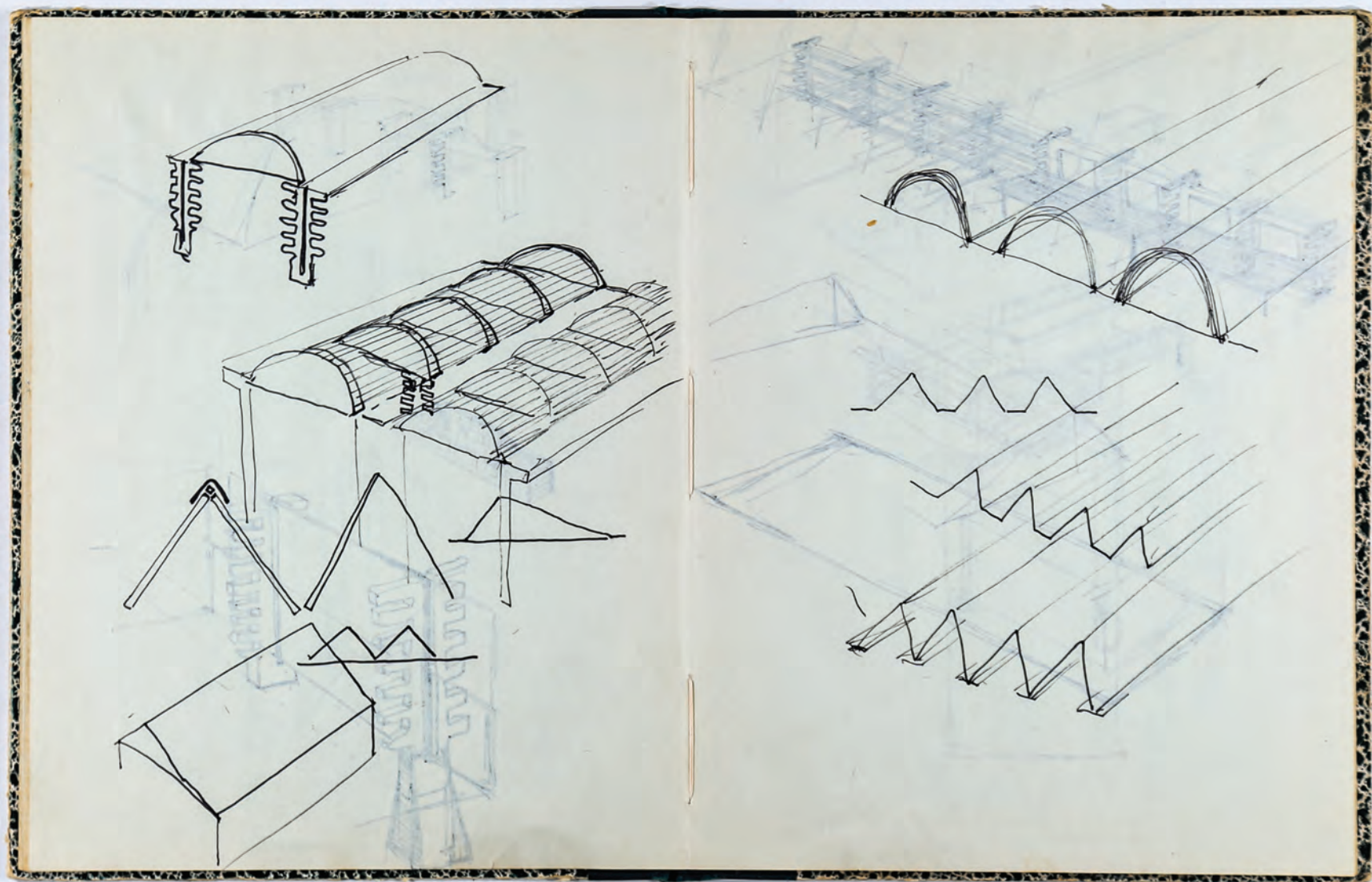


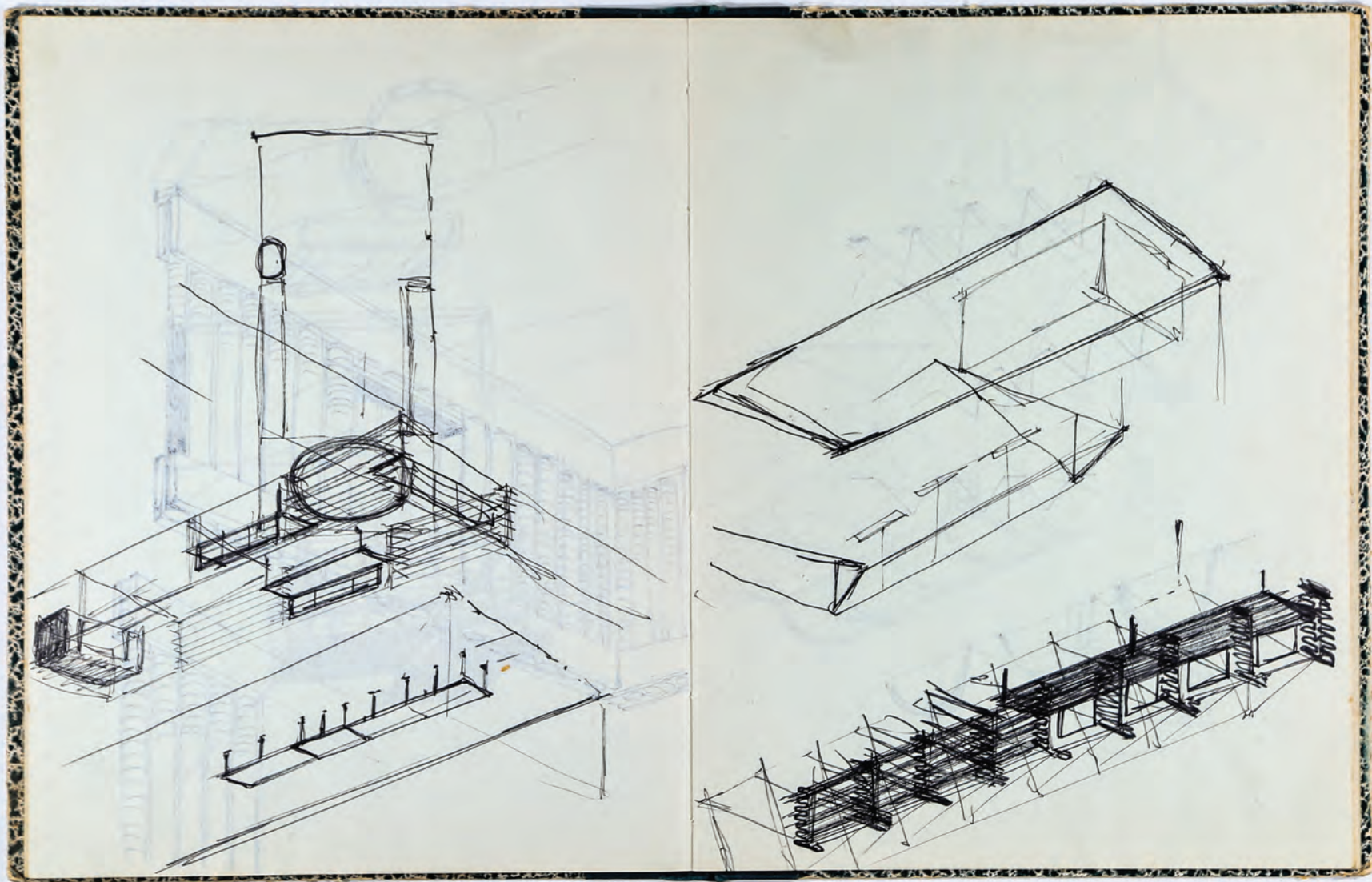


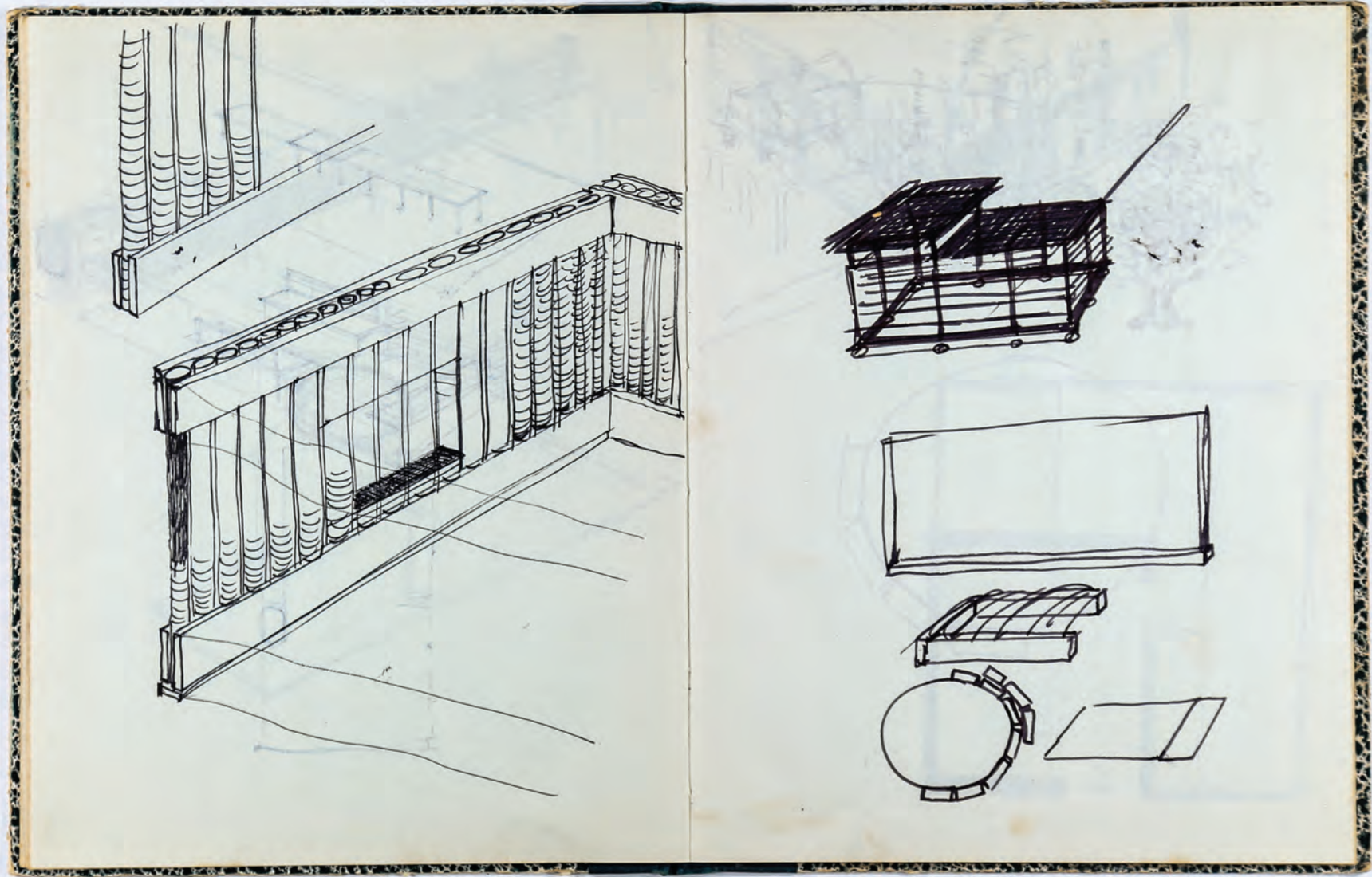


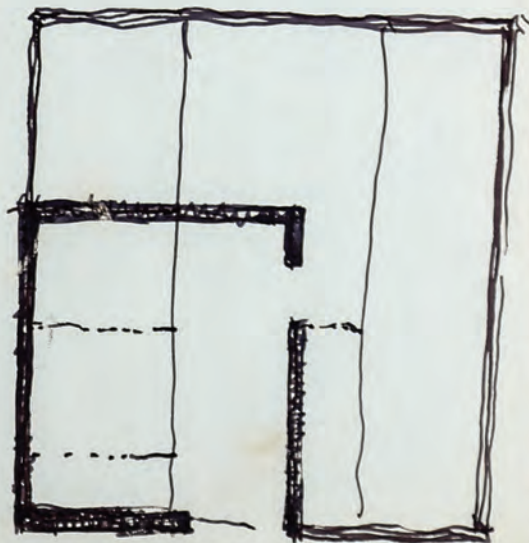
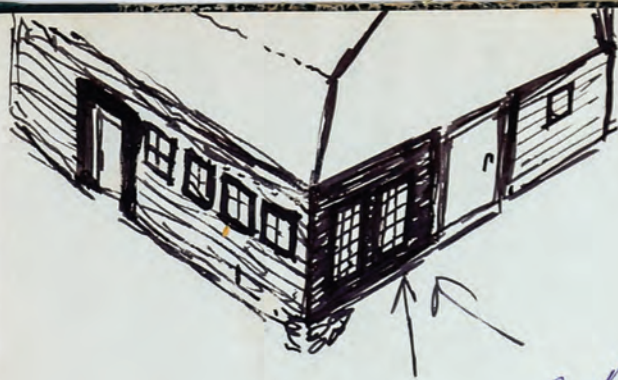
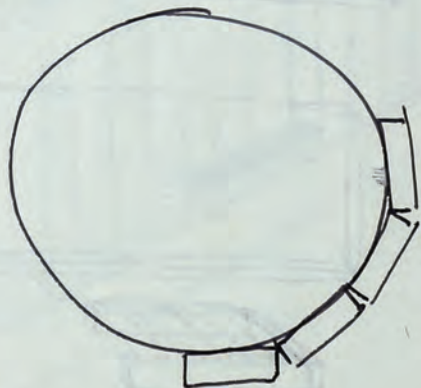


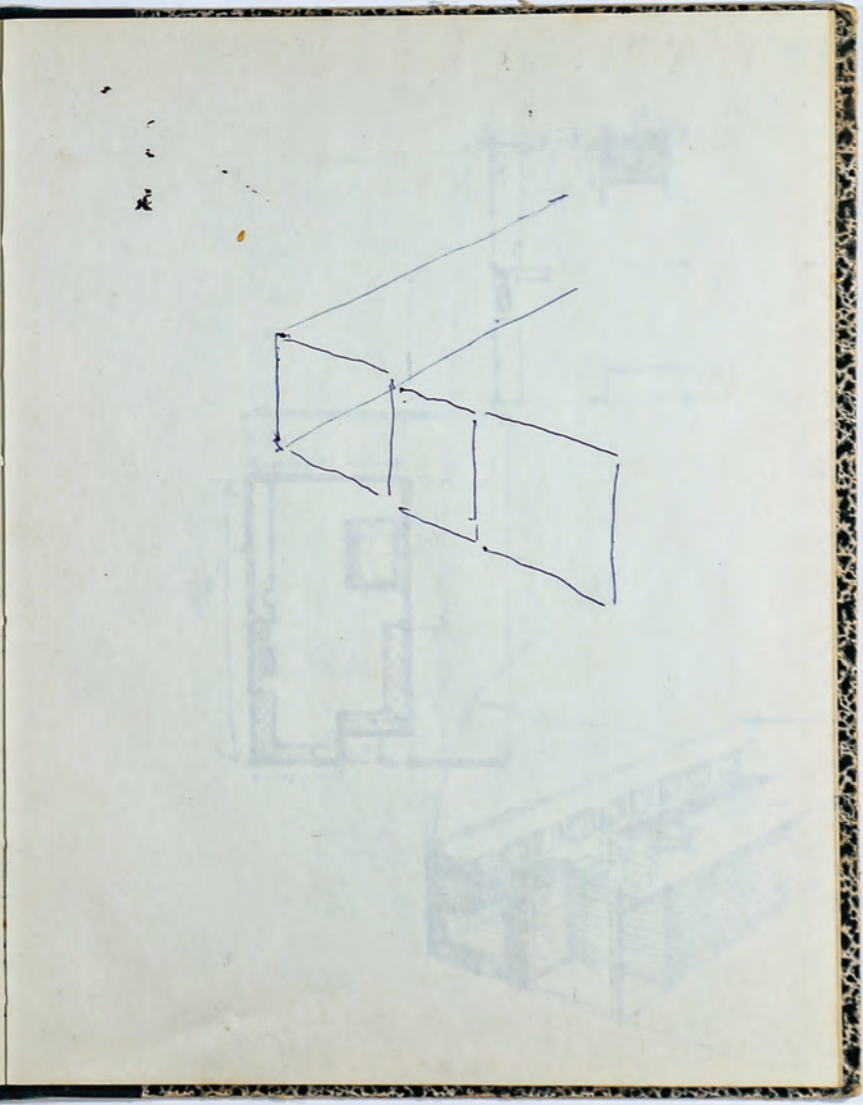
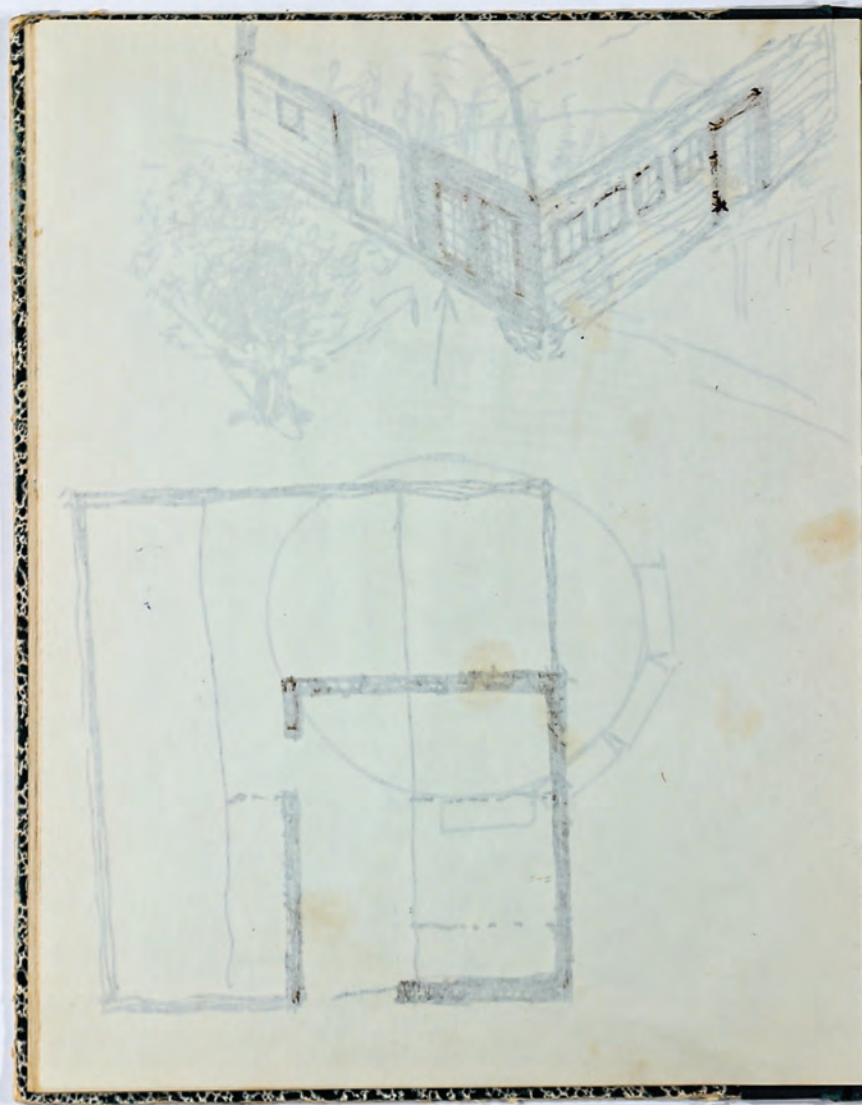


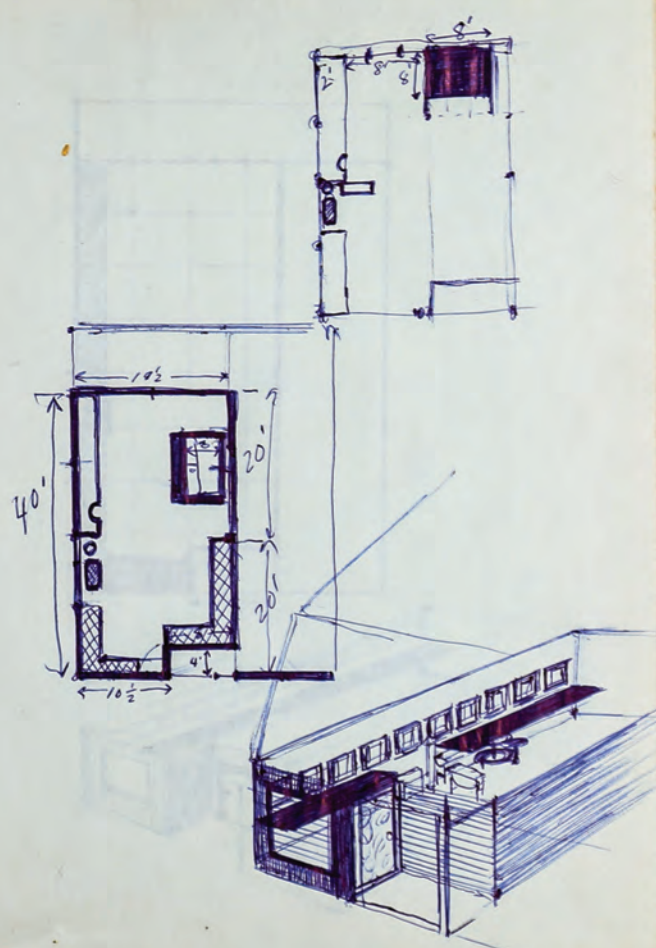


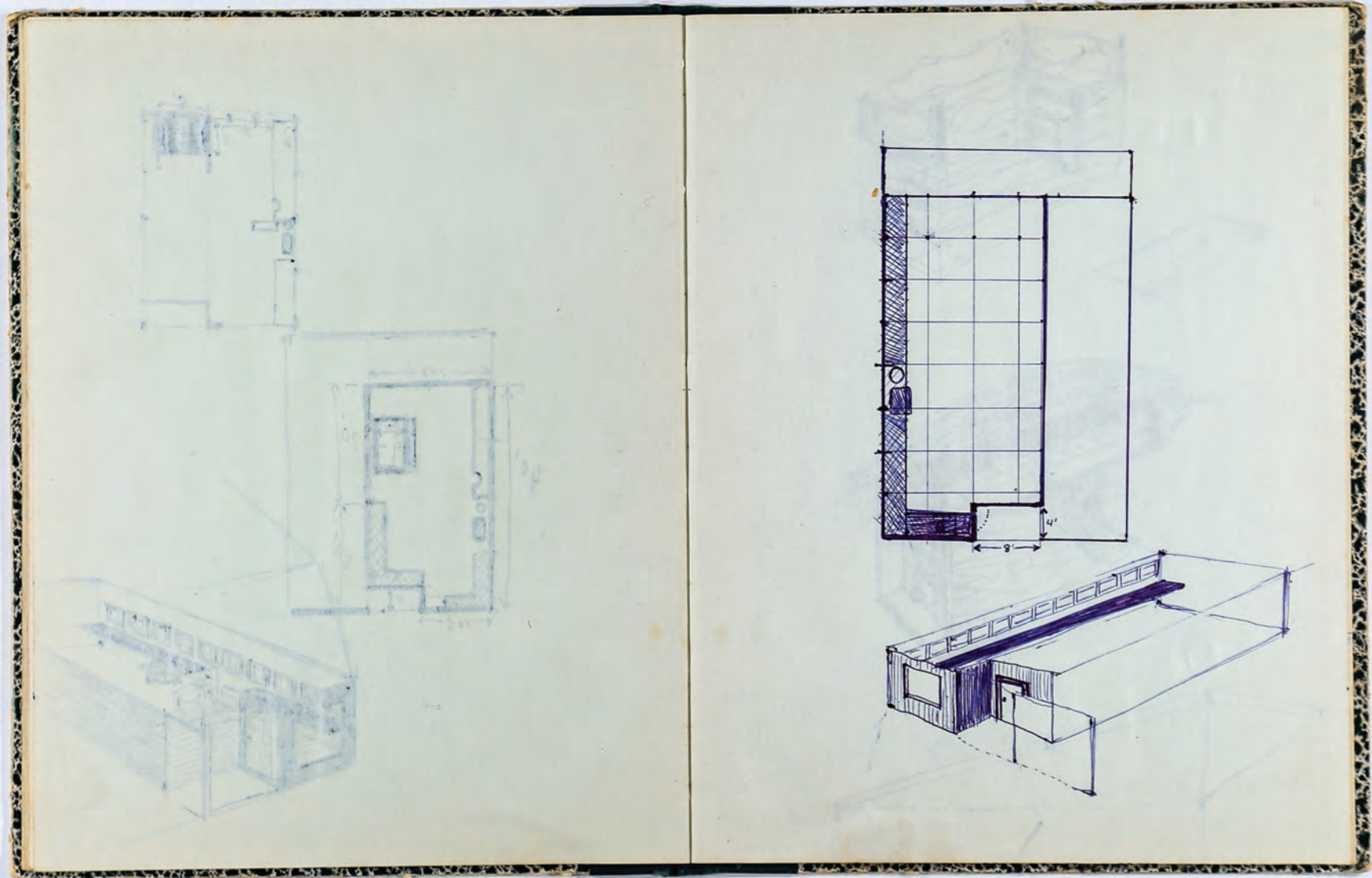


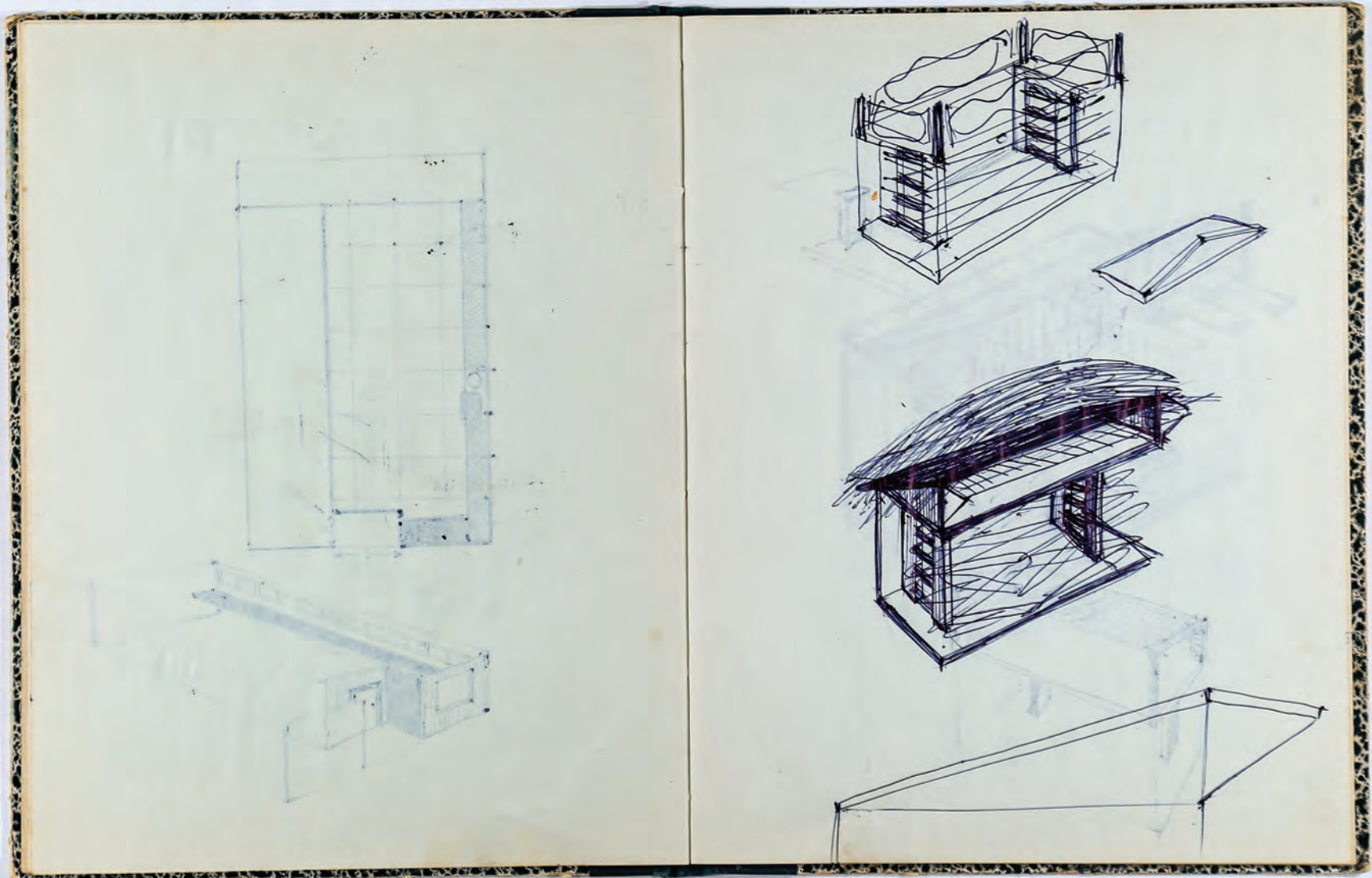


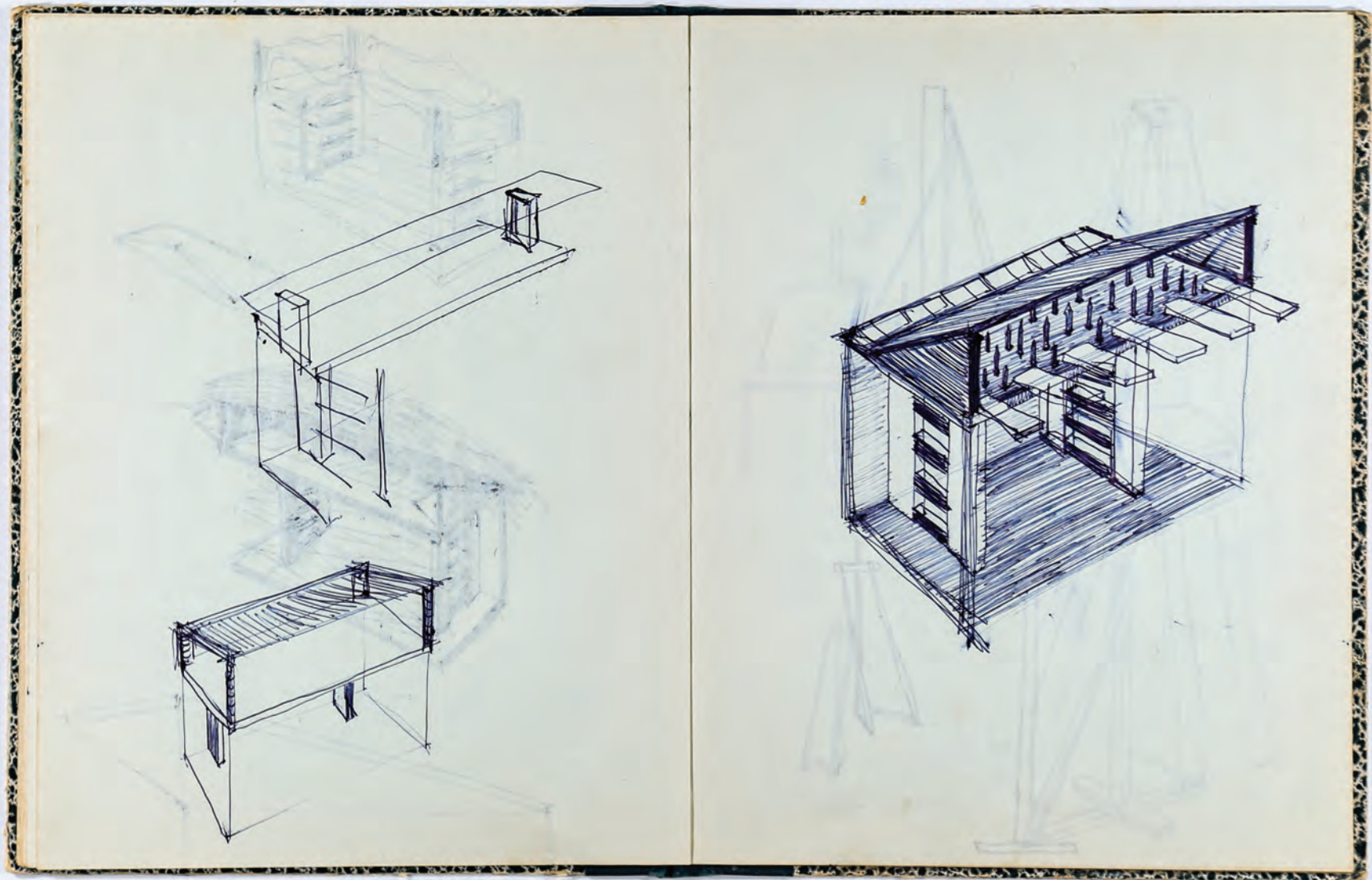


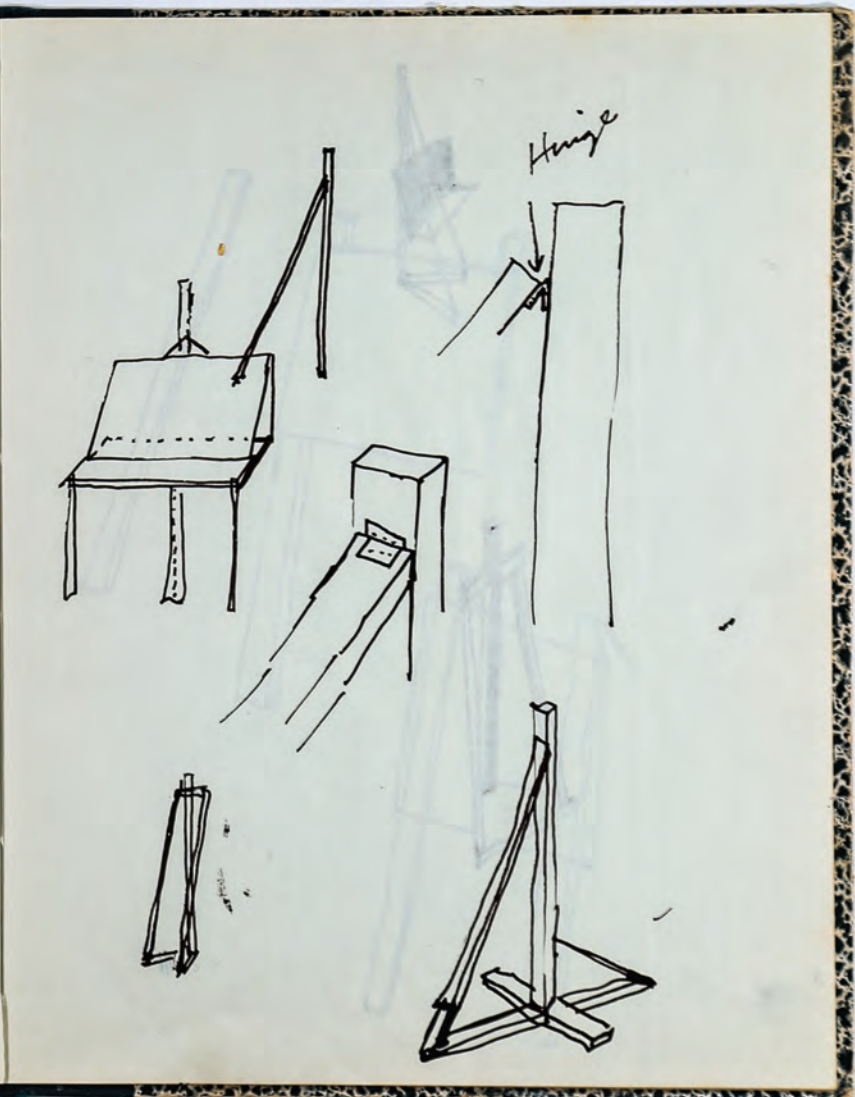
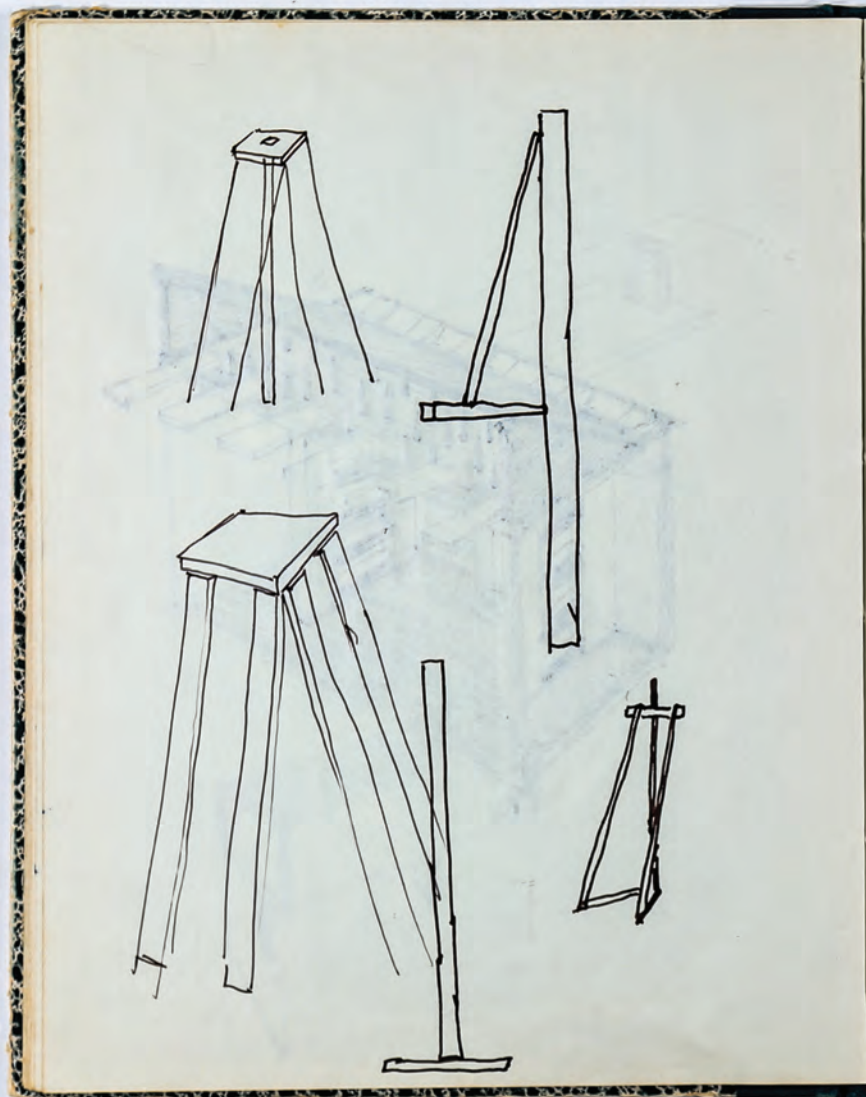


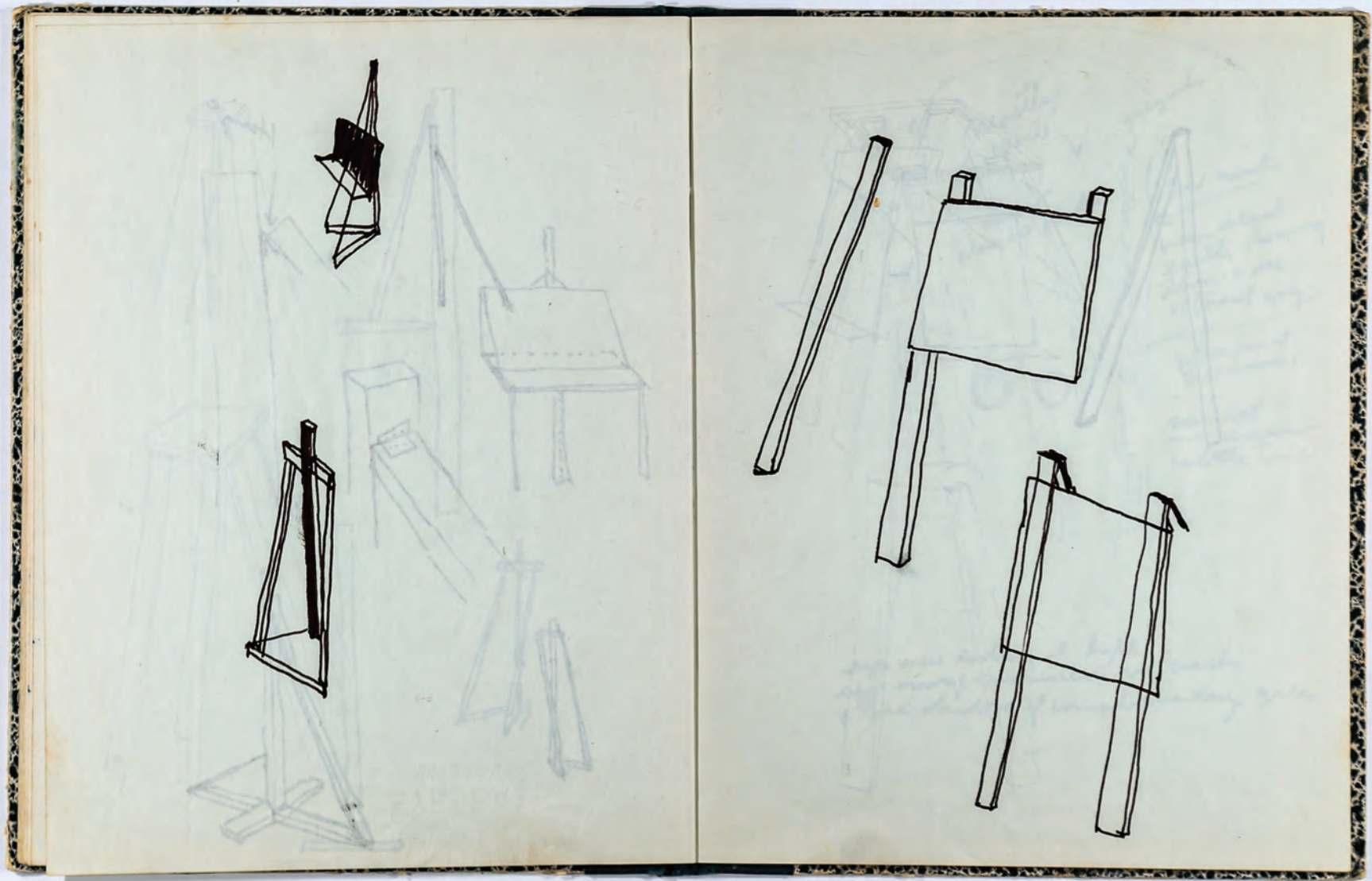


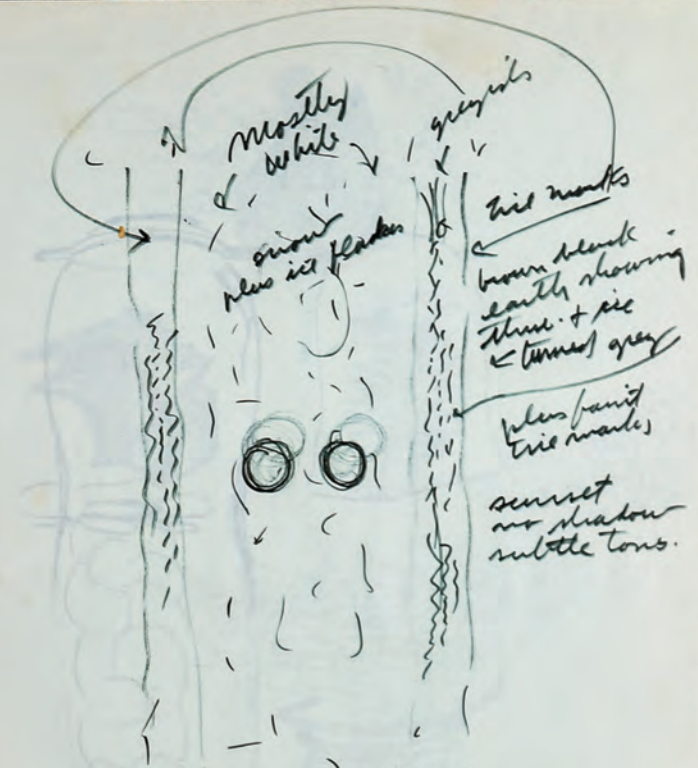
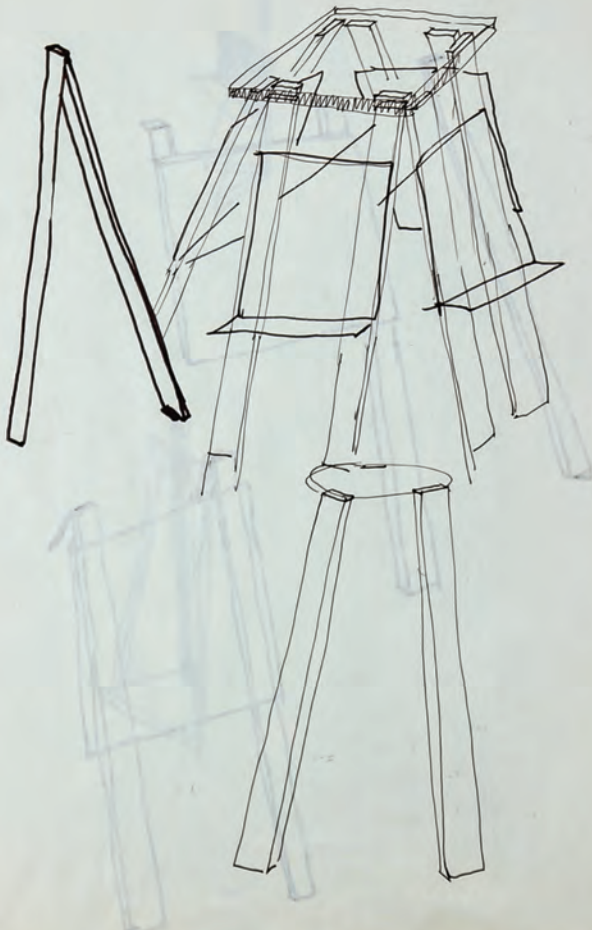




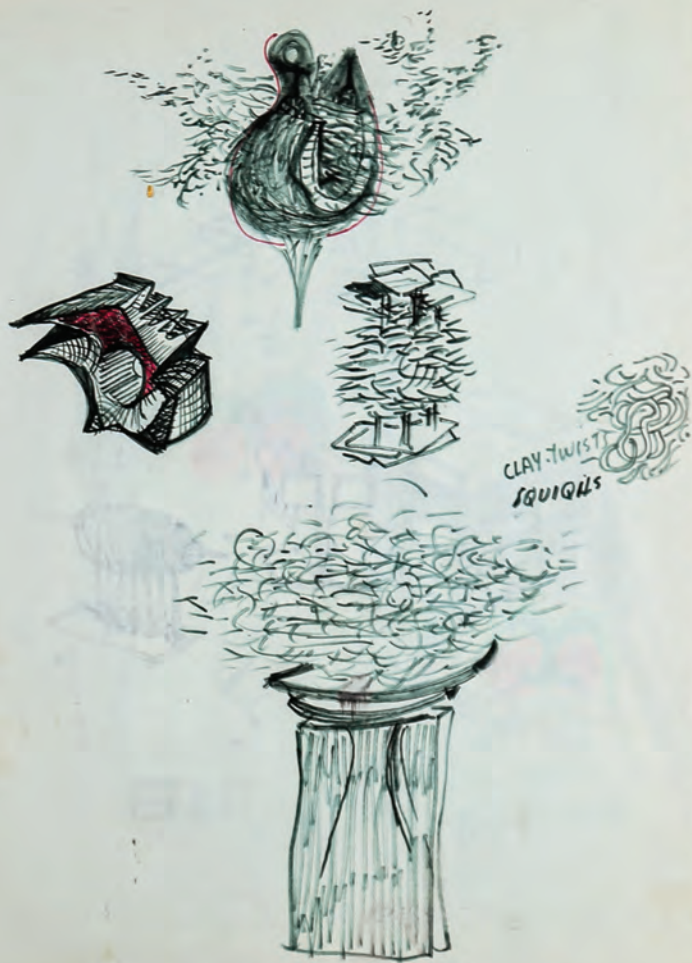
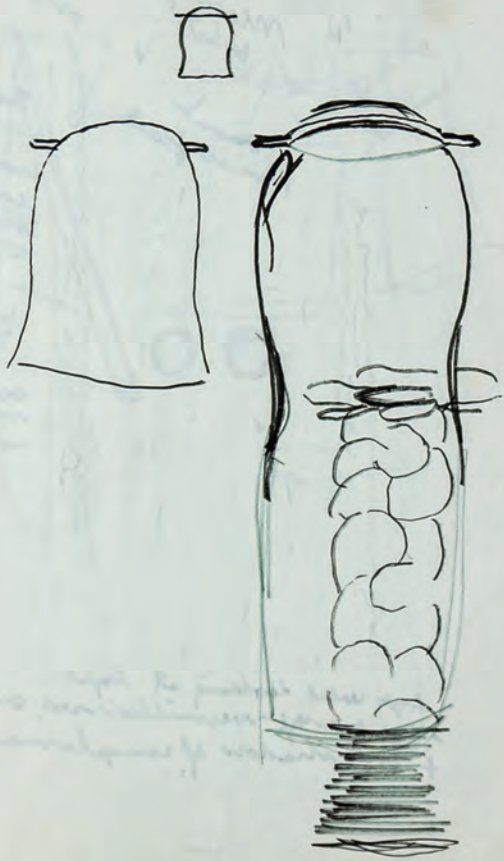


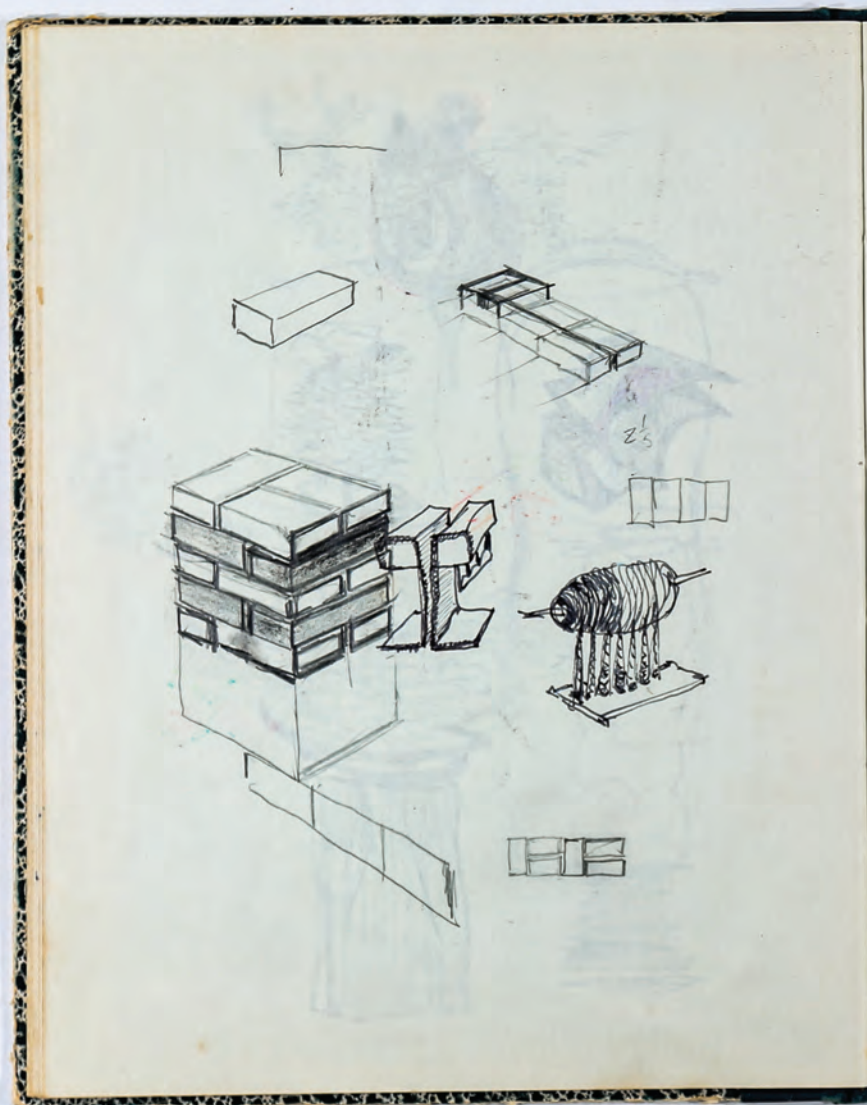


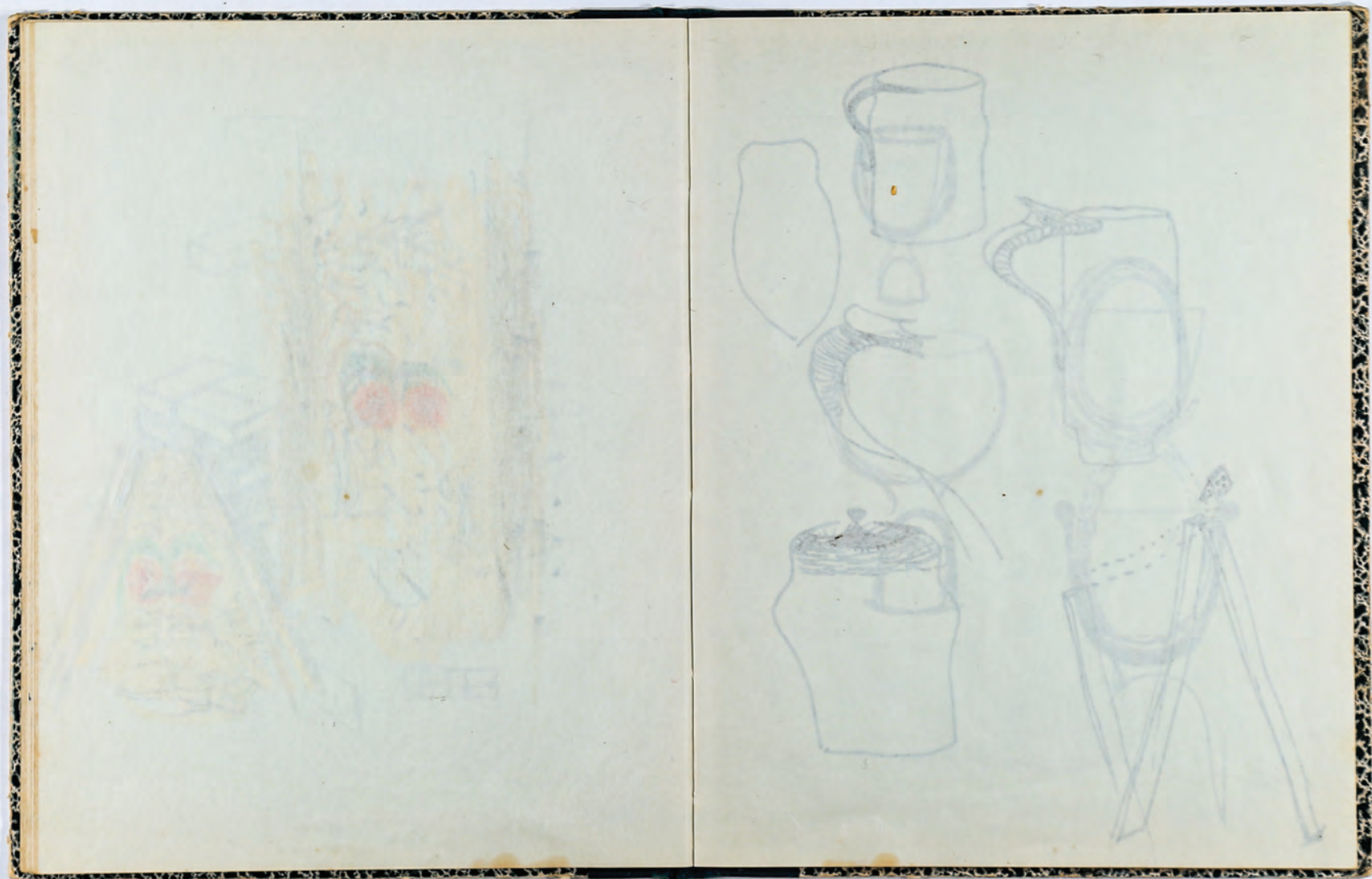


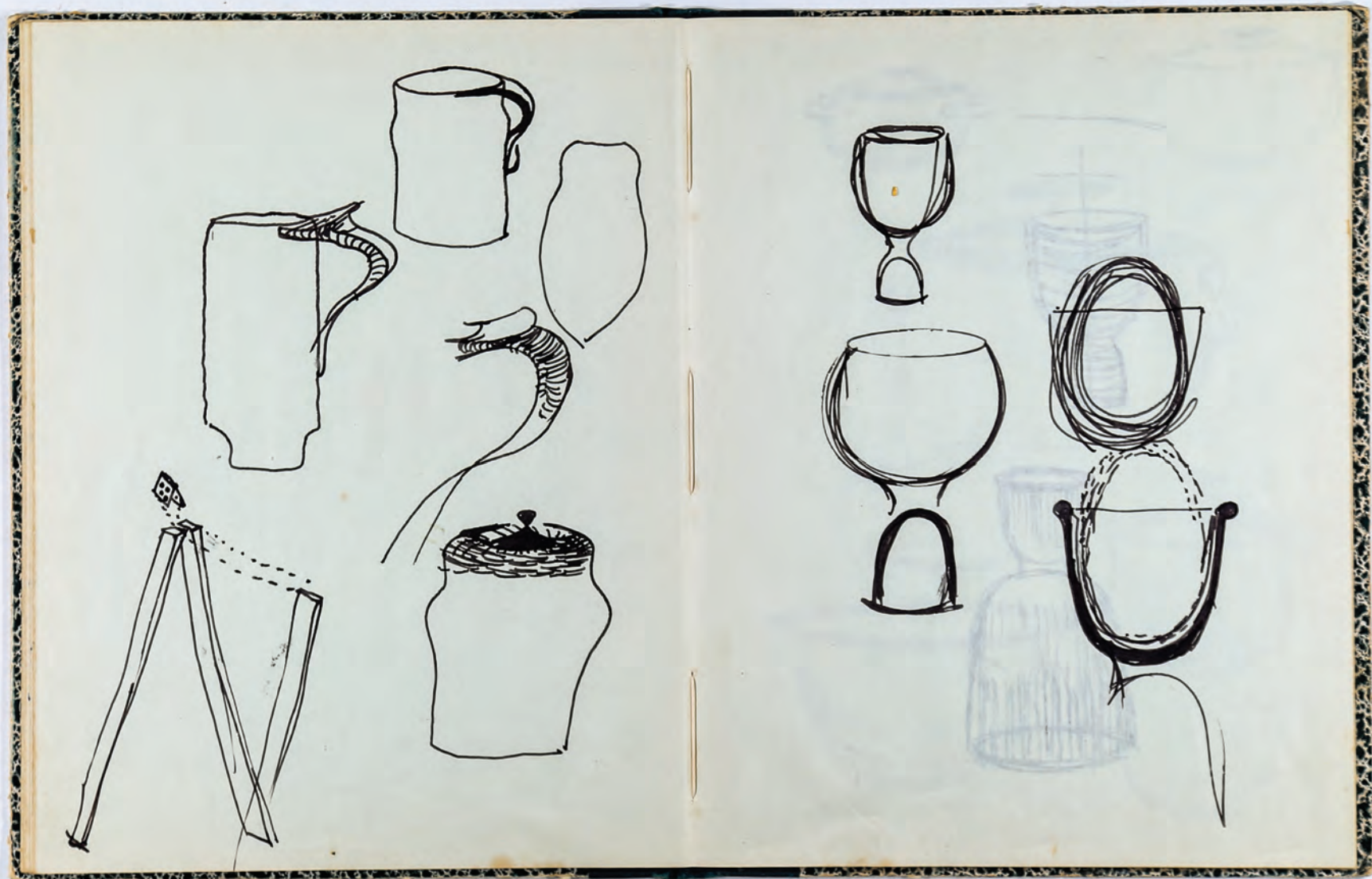


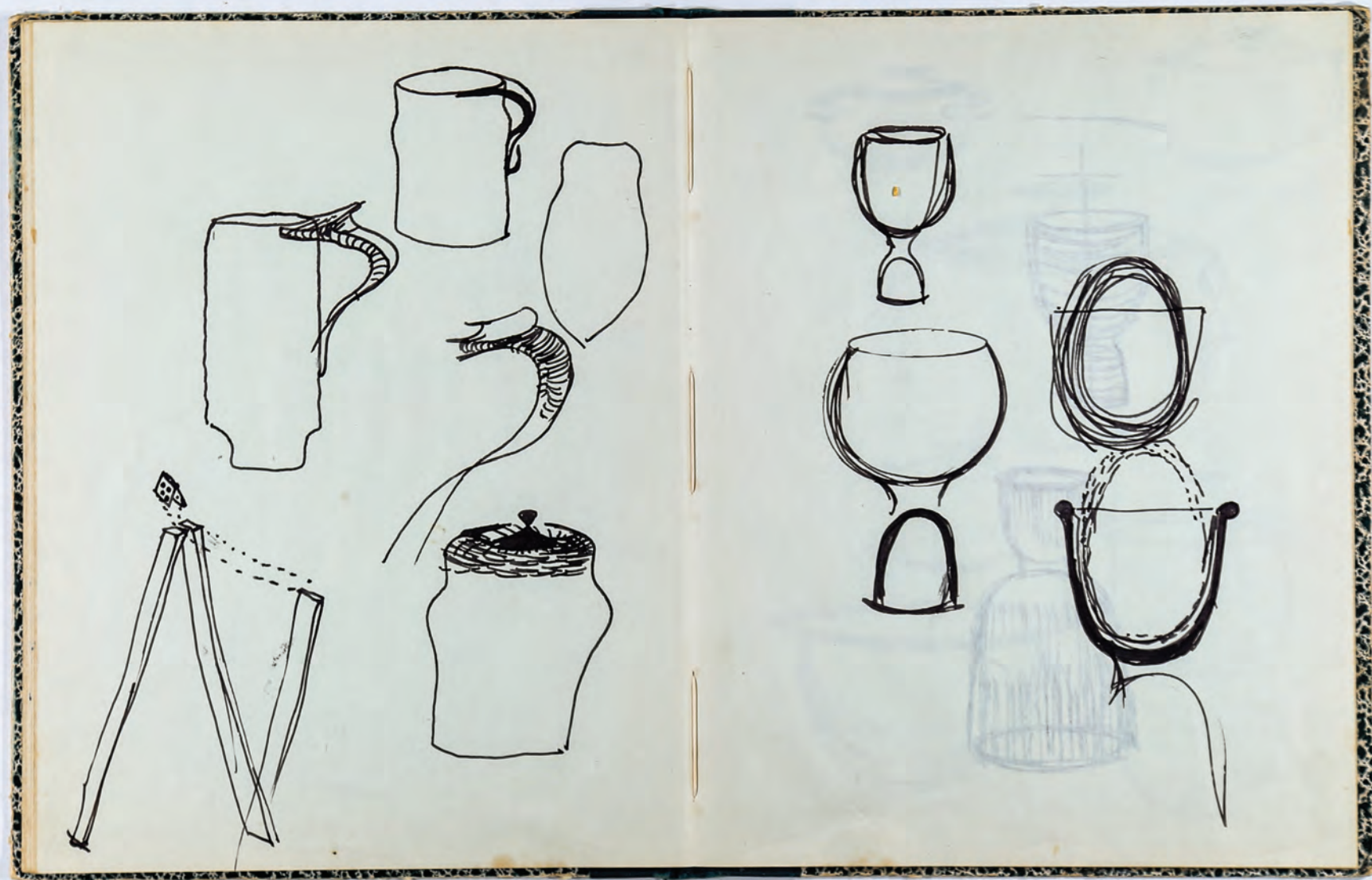
eyes were looking at light
 saw orange-vermillion red circles
 + one shadow of complementary green.



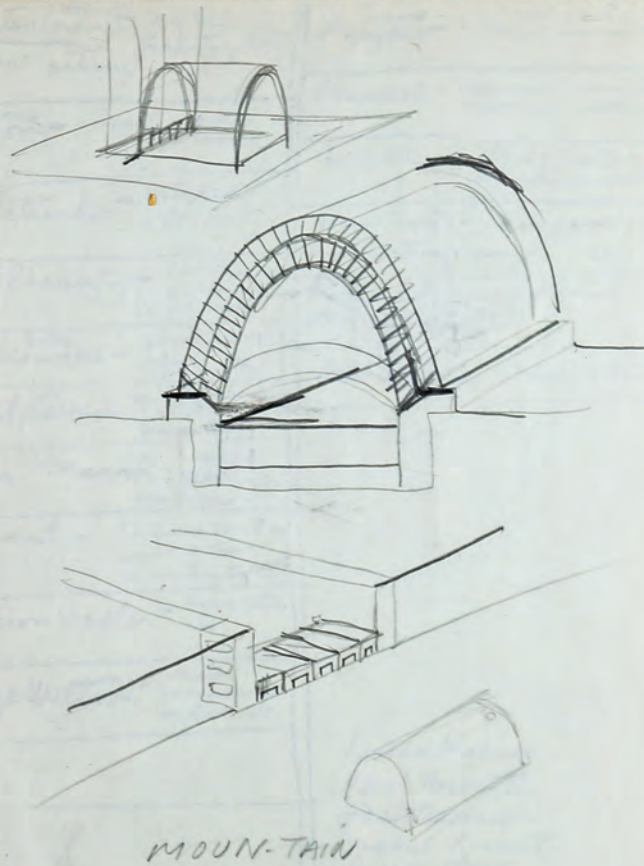
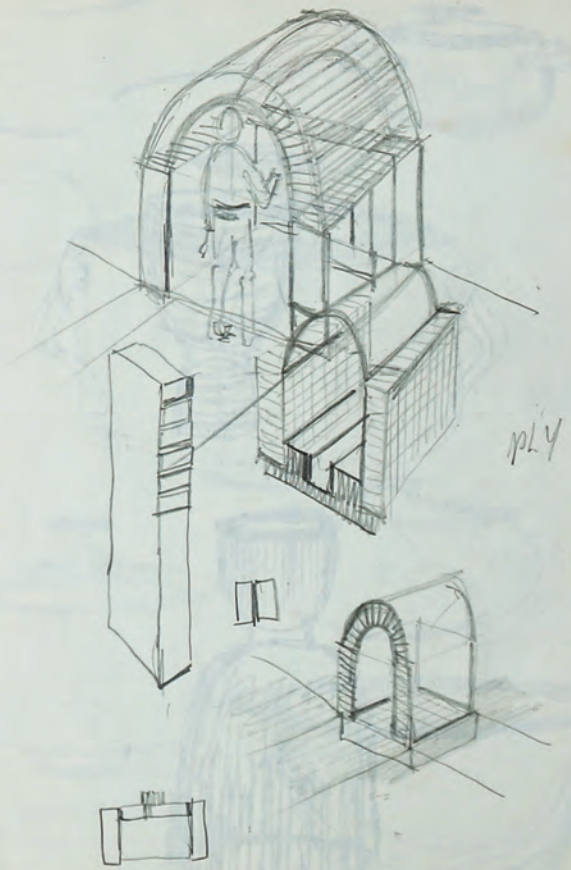


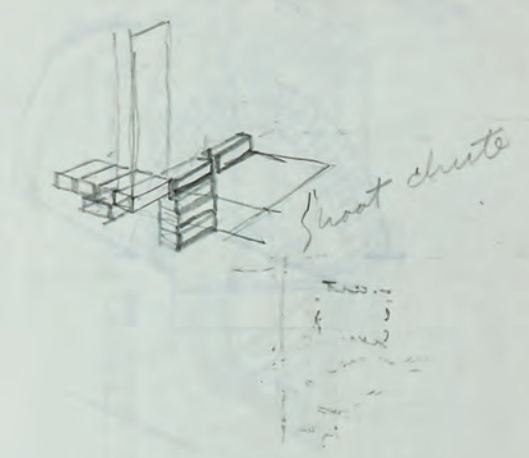












Carterburny ^{Regin} - U. of Ill.
 excellent pattern
 Faraday but

Marcus Dallyon - Haiti - Jackson Miss.

Dudchenko ^{Paris} - Westport
 a Bon Betty

James Flaherty - Ken Ferguson
 Kansas City
 art inst.

Kolakowski ^{Bette} - Rhode Island
 School
 Farmington

Ernest Lussier - Mrs. Cohen
 asst.
 Mont. art

Louis Marak - Univ. of
 Illinois
 Maynard.

Pat Purbst - Summer School
 Univ. of Iowa
 Remond, VT.

Marion Vepler - Haiti - Betty, etc.

George Weltner - writer -
 Business man
 Hamstead, etc.

Sam Noyaro - Indian St. Pa.
 light - narrow - work

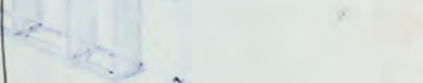
Blasdel - Kansas - paintings
 drawings - little pattern

BOMMER - Buffalo State -
 speak in pattern

John Chalke - England,
 interesting guy

Ronald - art teacher
 Meyers

Rumbulski (New Betty)



Linda Kries

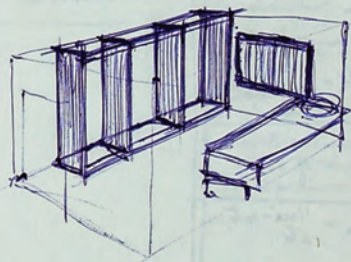
Paul Niottke

Gail Reseman

Esabel Levitt

Bruce Clark

Charles DiCostanzo



M

T

W

TH

Fri

1/15



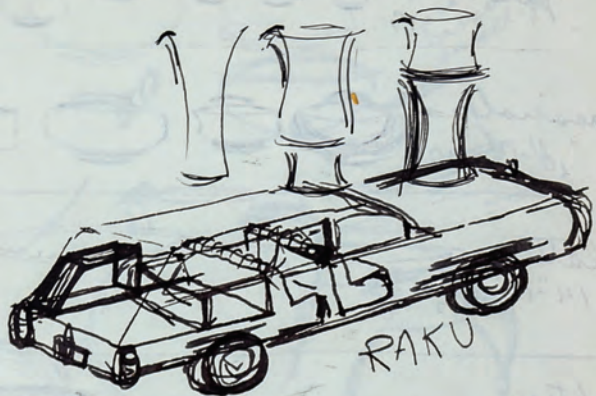
smallish
 jars. 15 8" or so.

casseroles 10' - 12" 10

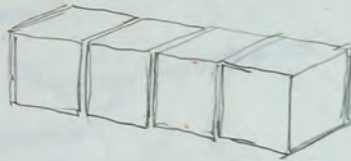
platters 14" - 16" 15'

ashtrays 10" - 12" 15' etc.





14.2³/₄
56.92



18
36

