



(12) **United States Plant Patent**
Aguilar Moran

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(54) **BANANA PLANT NAMED ‘CQB 115’**

(50) Latin Name: *Musa acuminata*×*balbisiana* group
AAB
Varietal Denomination: **CQB 115**

(71) Applicant: **Chiquita Brands L.L.C.**

(72) Inventor: **Juan Fernando Aguilar Moran**, La
Lima (HN)

(73) Assignee: **Chiquita Brands L.L.C.**, Charlotte, NC
(US)

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USPC **Plt./160**

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Primary Examiner — Kent L Bell

(74) *Attorney, Agent, or Firm* — Kilpatrick Townsend &
Stockton LLP

(57) **ABSTRACT**

‘CQB 115’ is a hybrid dessert banana variety that has a
dwarf stature, resistance to black Sigatoka, and produces
high-quality fruit.

3 Drawing Sheets

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Genus and species: The variety of this invention is botani-
cally identified as *Musa acuminata*×*balbisiana* group AAB,
AA representing two genomes of *M. acuminata* and B
representing one genome of *M. balbisiana*.

Variety denomination: The variety denomination is ‘CQB
115’.

BACKGROUND OF THE INVENTION

This invention relates to a new and distinctive hybrid
banana variety designated as ‘CQB 115’. The new hybrid
variety was the result of a field cross performed in 2004 in
La Lima, Cortes, Honduras between SH-3658×‘Pisang Mas’
(both unpatented). SH-3648 is a dwarf tetraploid cooking
banana resistant to black Sigatoka leaf spot disease, devel-
oped from accessions and breeding lines that are unpatented
and are in a La Lima, Cortes, Honduras germplasm collec-
tion. The pedigree of SH-3648 is II-408 and I-63→SH-
2952×SH-2741→SH-3386×SH-3362→SH-3648. The two
original II-408 and I-63 parental lines are the ‘Gaddatu’
(ABB) triploid clone from the Philippines and a *Musa*
balbisiana (BB) diploid clone of unknown origin that was
collected in Costa Rica. SH-2741 is a dwarf, bred diploid
that was derived from AVP-45×AVP-23→SH-90×II-
334→SH-2518×II-158→SH-2741. The AVP-45, AVP-23,
II-334 and II-158 parental lines are a wild *Musa acuminata*
subsp. *zebrina* diploid accession from Java, a ‘Robusta’
Cavendish triploid clone that was collected in Jamaica, a
wild *Musa acuminata* subsp. *siamea* diploid from Malaysia,
and a parthenocarpic *Musa acuminata* subsp. *errans* diploid
from North Borneo, respectively. The male parent, ‘Pisang
Mas’, is a naturally occurring diploid (AA). ‘Pisang Mas’
produces small bunches and very sweet-flavored fingers,
which are eaten fresh or used as dessert and are sweeter than
the common Cavendish banana.

‘CQB 115’ was selected in 2009 from several first-
generation seedlings from the cross between SH-3658 and

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‘Pisang Mas’. It was selected as a triploid hybrid that
maintained the dwarf plant stature and black Sigatoka leaf
spot disease-resistance of its SH-3648 female parental line
and produced bunches of 20 kilograms with fruits of the
same quality of the male ‘Pisang Mas’ parental line.

‘CQB 115’ was asexually reproduced by corms by the
inventor at the experimental farm in La Lima, Cortés,
Honduras. All plant and fruit characteristics run true to the
original selected plant and are identical in all aspects.

BRIEF SUMMARY OF VARIETY DESCRIPTION

‘CQB 115’ is a hybrid dessert banana variety that has a
dwarf stature, resistance to black Sigatoka, and produces
high-quality fruit.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The Figures depict various characteristics of the ‘CQB
115’ hybrid banana variety. The colors shown in the photo-
graphs are as nearly true as is reasonably possible in color
representations of this type.

FIG. 1 shows the typical appearance of a plant.

FIG. 2 shows blotches at the petiole base and a petiole
canal leaf I.

FIG. 3 shows the shape of a leaf blade base (A) and leaf
upper (B) and lower (C) surfaces.

FIG. 4A-B show water suckers (A) and leaves without
blotches (B).

FIG. 5 shows a typical fruit bunch.

FIG. 6 shows male buds.

FIG. 7A-C shows bracts of a male bud.

FIG. 8A-C shows lobes of compound tepals (A and B) and
free tepals (C).

FIG. 9 shows stamens without pollen.

FIG. 10A-B shows the style shape (A) and an ovary (B).

FIG. 11 shows a male flower.

FIG. 12 shows rowed ovules.
FIG. 13 shows a typical middle hand.
FIG. 14A-C shows the finger shape (A); a transverse section of fruit (B); and the fruit apex (C).
FIG. 15 shows a mature fruit peel (A), mature pulp (B), and mature fruit apex (C).

DETAILED DESCRIPTION OF THE INVENTION

‘CQB 115’ differs from its male parent ‘Pisang Mas’ as follows: ‘Pisang Mas’ is a diploid (2n) plant whereas ‘CQB 115’ is a triploid (3n). ‘CQB 115’ also has a dwarf stature compared to ‘Pisang Mas’.
‘CQB 115’ differs from its female parent SH-3648 as follows: SH-3648 is tetraploid (4n) whereas ‘CQB 115’ is triploid (3n). ‘CQB 115’ also produces dessert-quality fruit.
‘CQB 115’ differs from the common Cavendish variety in its resistance to black Sigatoka leaf spot disease.
The following is a detailed botanical description of the new variety ‘CQB 115’. The description is from plants located in Limón, Costa Rica that were evaluated between 2013 and 2014. The Ratooning Index is from data collected in an experimental plot located in El Progreso, Honduras. Colors are described using the Munsell Color Chart for Plant Tissues. The descriptions are in accordance with the internationally standardized “Descriptors for Banana (*Musa* spp.)” elaborated by IPGRI-INIBAP/CIRAD, 1996.
The ‘CQB 115’ plant and its fruit may vary slightly from the detailed descriptors shown below due to cultural practices, soil types and climatic conditions under which the variety may be grown.

TABLE 1

Detailed Descriptors	
6.1 1	Leaf habit: drooping (FIG. 1).
6.1.2	Dwarfism: dwarf type, leaves strongly overlapped and leaf ratio is 3.15 (278/88 cm)
6.2.1	Pseudostem height: ≥3.0 m (3.46 m at flowering)
6.2.2	Pseudostem aspect: robust (83.0 cm)
6.2.3	Pseudostem colour: 5Y5/6
6.2.4	Pseudostem appearance: shinny (not waxy)
6.2.5	Predominat underlying colour of the pseudostem: 10R5/6
6.2.6	Pigmentation of the underlying pseudostem: 10R6/6
6.2.7	Sap colour: Watery, not translucent
6.2.8	Wax on leaf sheaths: very little wax
6.2.9	Number of suckers: six or seven suckers
6.2.10	Development of suckers: more than ¾ of the height of the parent plant (FIG. 1)
6.2.11	Position of suckers: close to parent growing (vertical growth) (FIG. 4A)
6.3.1	Blotches at the petiole base: extensive pigmentation (FIG. 2).
6.3.2	Blotches colour: 10R3/6
6.3.3	Petiole canal leaf III: open with margins spreading (FIG. 2).
6.3.4	Petiole margins: winged and clasping the pseudostem (FIG. 2)
6.3.5	Wing type: dry
6.3.6	Petiole margin colour: 2.5GY7/6
6.3.7	Edge of the petiole margin: with a colour line along (2.5R4/4)
6.3.8	Petiole margin width: <1 cm
6.3.9	Leaf blade length: around 278.0 cm
6.3.10	Leaf blade width: around 88.0 cm
6.3.10.1	Leaf ratio: ≥3 (around 3.16)
6.3.11	Petiole length: 70.0 cm
6.3.12	Colour of leaf upper surface: 5GY3/4 (FIG. 3B)
6.3.13	Appearance of leaf upper surface: dull (FIG. 3C)
6.3.14	Colour of the leaf lower surface: 5GY4/4 (FIG. 3C)
6.3.15	Appearance of the leaf lower surface: dull (FIG. 3C).
6.3.16	Wax on leaves: very little or no visible signs of wax

TABLE 1-continued

Detailed Descriptors	
6.3.17	Insertion point of leave blades on petiole: asymmetric (FIG. 3A).
6.3.18	Shape of leave blade: both sides rounded (FIG. 3A).
6.3.19	Leaf corrugation: even, smooth
6.3.20	Colour of midrib dorsal surface: 5GY5/4 (FIG. 3B).
6.3.21	Colour of midrib ventral surface: between 2.5GY7/6 (FIG. 3C).
6.3.22	Colour of cigar leaf dorsal surface: 2.5GY5/4.
6.3.23	Blotches on leaves of water suckers: without blotches (FIG. 4B)
6.4.1	Peduncle length: 89 cm.
6.4.2	Empty nodes on peduncle: 2
6.4.3	Peduncle width: 24.5 cm
6.4.4	Peduncle colour: 5GY5/6
6.4.5	Peduncle hairiness: hairless
6.4.6	Bunch Position: hanging vertically (bunch ready for harvest)
6.4.7	Bunch shape: cylindrical (FIG. 5)
6.4.8	Bunch appearance: very compact (one cannot place one’s finger between the hands of the fruit) (FIG. 5)
6.4.9	Flowers that form the fruit: female
6.4.10	Fruits: bi-seriate
6.4.11	Rachis type: present and male but may be degenerated or persistent (FIG. 6)
6.4.12	Rachis position: falling vertically
6.4.13	Rachis appearance: neutral flowers
6.4.14	Male bud type: normal present (FIG. 6)
6.4.15	Male bud shape: like a top (FIG. 6)
6.4.16	Male bud size: length 21.5 cm and diameter 29.5 cm (at the widest section)
6.5.1	Bract base shape: small shoulder (FIG. 7A)
6.5.2	Bract apex shape: obtuse (FIG. 7C)
6.5.3	Bract imbrication: young bracts slightly overlap (FIG. 6).
6.5.4	Color of bract external face: 5R3/4 (FIG. 7A).
6.5.5	Colour of the bract internal face: 5R4/8 (FIG. 7B).
6.5.6	Colour on the bract apex: tinted with yellow.
6.5.7	Colour stripes on bract: with discoloured lines on external face (FIG. 7C)
6.5.8	Bract scars on rachis: very prominent
6.5.9	Fading of colour on bract base: colour homogenous (pigmentation is uniform and continues until the base (FIG. 7C)
6.5.10	Male bract shape: lanceolate $x/y \leq 0.28$ (5/20,6 = 0.24)
6.5.11	Male bract lifting: lifting two or more at the time (FIG. 6)
6.5.12	Bract behavior before falling: revolute (rolling) (FIG. 6)
6.5 13	Wax on the bract: very little wax
6.5.14	Presence of grooves on the bract: moderate grooving (parallel bridges are distinguishable)
6.6.1	Male flower behavior: falling before the bract.
6.6.2	Compound tepal basic colour: 2.5Y8/4 (FIG. 8C)
6.6.3	Compound tepal pigmentation: very few or no visible sign of pigmentation (FIG. 8C)
6.6.4	Lobe colour of compound tepal: 2.5Y8/10 (FIG. 8C)
6.6.5	Lobe development of compound tepal: developed (FIG. 8C)
6.6.6	Free tepal colour: translucent (FIG. 8A)
6.6.7	Free tepal shape: oval (FIG. 8A)
6.6.8	Free tepal appearance: simple folding under apex (FIG. 8A)
6.6.9	Free tepal apex development: developed (FIG. 8B)
6.6.10	Free tepal apex shape: thread-like (FIG. 8B)
6.6.11	Anther exertion: exerted (FIG. 9)
6.6.12	Filament colour: white
6.6.13	Anther colour: 2.5Y8/2
6.6.14	Pollen sac colour: 2.5YR5/4
6.6.16	Style basic colour: white (FIG. 10A)
6.6.17	Pigmentation on style: without pigmentation
6.6.18	Style exertion: inserted (FIG. 10A)
6.6.19	Style shape: curved in the middle (FIG. 10A)
6.6.20	Stigma colour: 7.5YR7/6 (FIG. 10A)
6.6.21	Ovary shape: slightly arched (FIG. 10B)
6.6.22	Ovary basic colour: 5Y8/4 (FIG. 10B)
6.6.23	Ovary pigmentation: very few or no visible sign of pigmentation (FIG. 10B).
6.6.24	Dominant colour of male flower: light yellow (FIG. 11)
6.6.26	Arrangement of ovules: two rowed (FIG. 12)
6.7.1	Fruit position: curved upward 45° or more (based on the mid-hand of the bunch)
6.7.2	Number of fruits in the mid-hand of the bunch: 20 (FIG. 13)
6.7.3	Fruit length: 15 cm (FIG. 14A)
6.7.4	Fruit shape: slightly curved (FIG. 14A)

TABLE 1-continued

Detailed Descriptors	
6.7.5	Transverse section of fruit: slightly ridged (FIG. 14B)
6.7.6	Fruit apex: pointed (FIG. 14C)
6.7.7	Remains of flower relicts at fruit apex: base of the style prominent
6.7.8	Fruit pedicel length: 40 mm
6.7.9	Fruit pedicel width: 10 mm
6.7.10	Pedicel surface: hairless
6.7.11	Fusion of pedicels: very partially or no visible sign of fusion
6.7.12	Immature fruit peel colour: 5GY7/6 (FIG. 14A)
6.7.13	Mature fruit peel colour: close to bright yellow (Table B, IPGRI-INIBAP/CIRAD, 1996)
6.7.14	Fruit peel thickness: 3 mm
6.7.15	Adherence of the fruit peel: Fruit peels easily
6.7.16	Crack in fruit peel: without cracks (ripening under experimental conditions)
6.7.17	Pulp in fruit: with pulp
6.7.18	Pulp colour before maturity: 2.5Y8/4
6.7.19	Pulp colour at maturity: close to yellow (Table B, IPGRI-INIBAP/CIRAD 1996)
6.7.20	Fruit fall from hands: Persistent
6.7.21	Flesh texture: Soft (ripening under experimental conditions)
6.7.22	Predominant taste: Sweet and acid
6.7.23	Presence of seeds with source of pollen: no

TABLE 1-continued

Detailed Descriptors	
6.7.24	Seed surface: not applicable
6.7.25	Seed shape: not applicable

TABLE 2

Additional fruit, flowering, and harvest descriptors Data from the first production cycle	
	Days for planting to first flowering: 262.28
	Number of leaves at flowering: 14.12
	Number of leaves at harvest: 11.36
	Days from flowering until harvest: 52.46
	Bunch weight (Kg): 16.15
	Number of hands: 6.60
	Finger diameter (1/32"): 13.32
	Days from first flowering until the second one: 236.63
	Index of ratooning: 1.54

What is claimed is:
1. A new and distinct banana plant having the characteristics substantially as described and illustrated herein.

* * * * *



FIG. 1

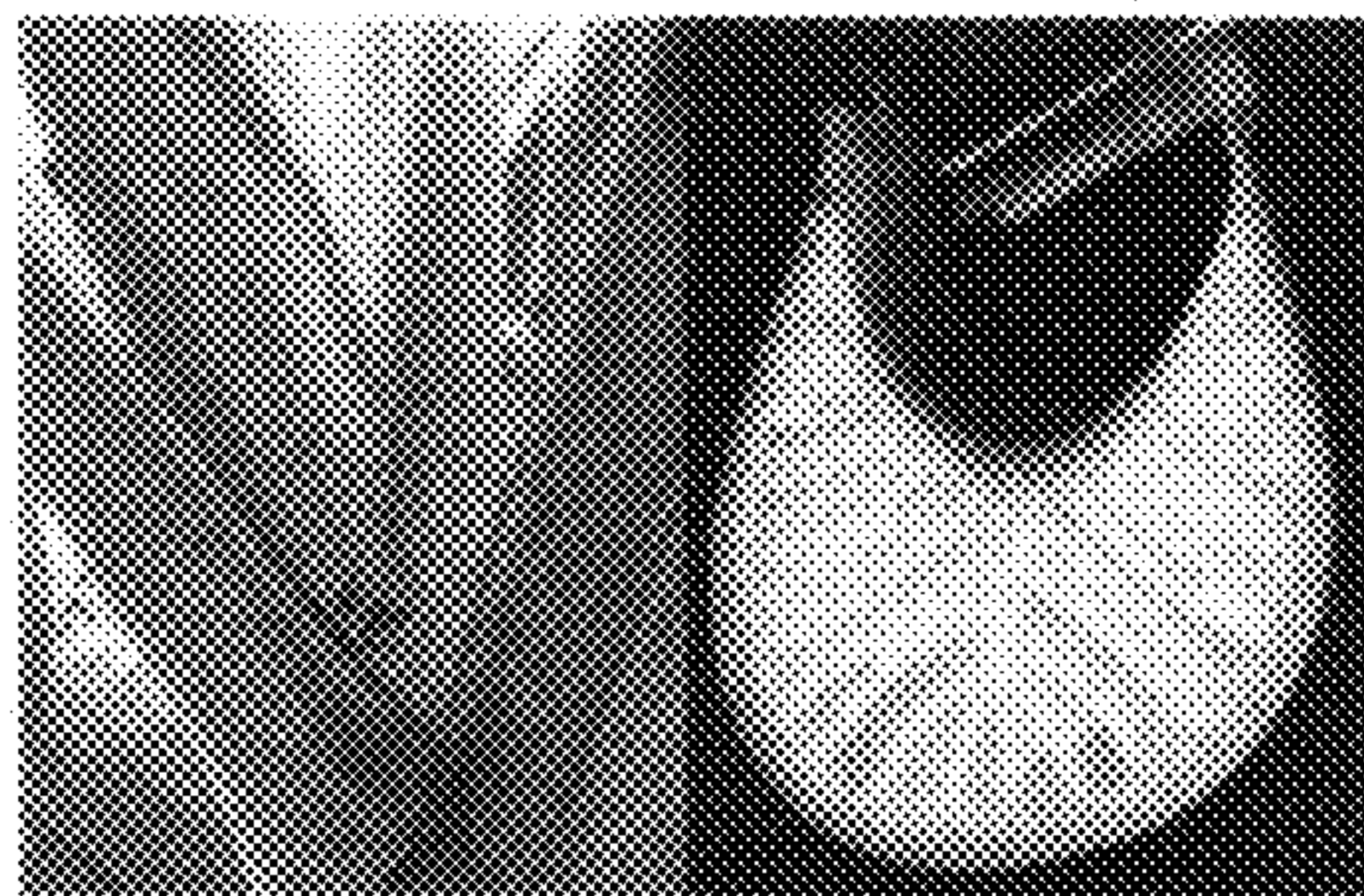


FIG. 2

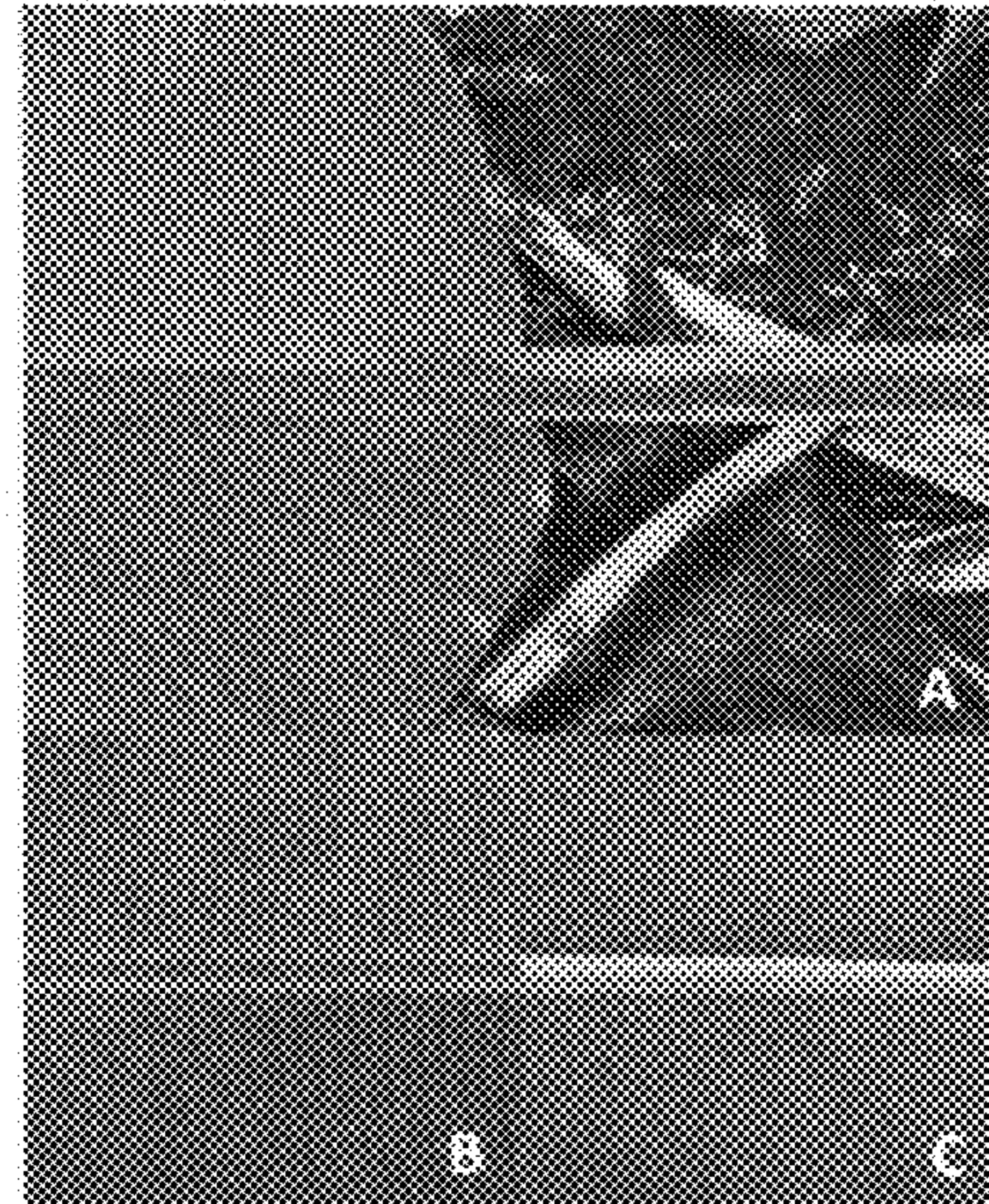


FIG. 3A, 3B & 3C



FIG. 4A & 4B

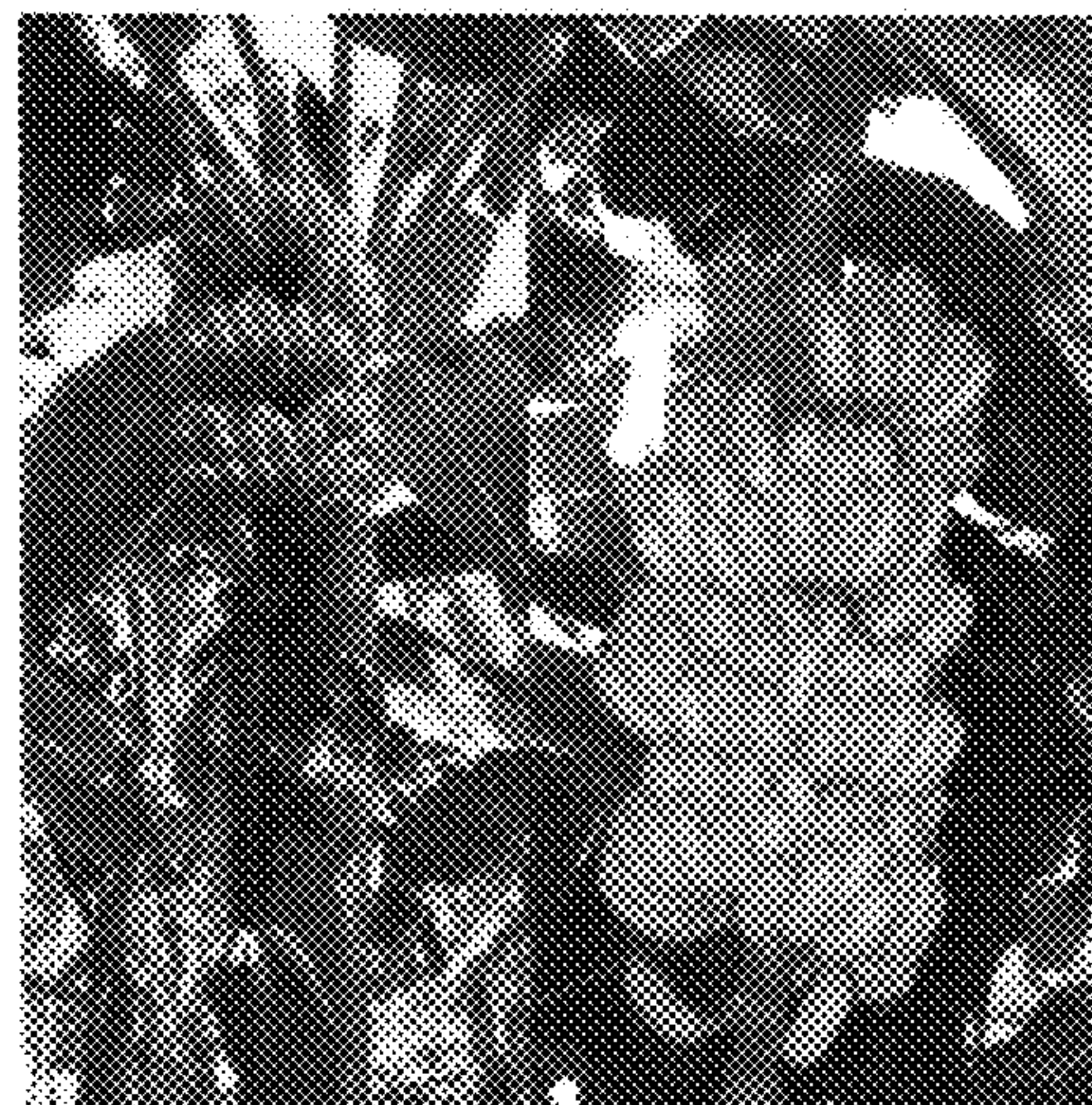


FIG. 5



FIG. 6

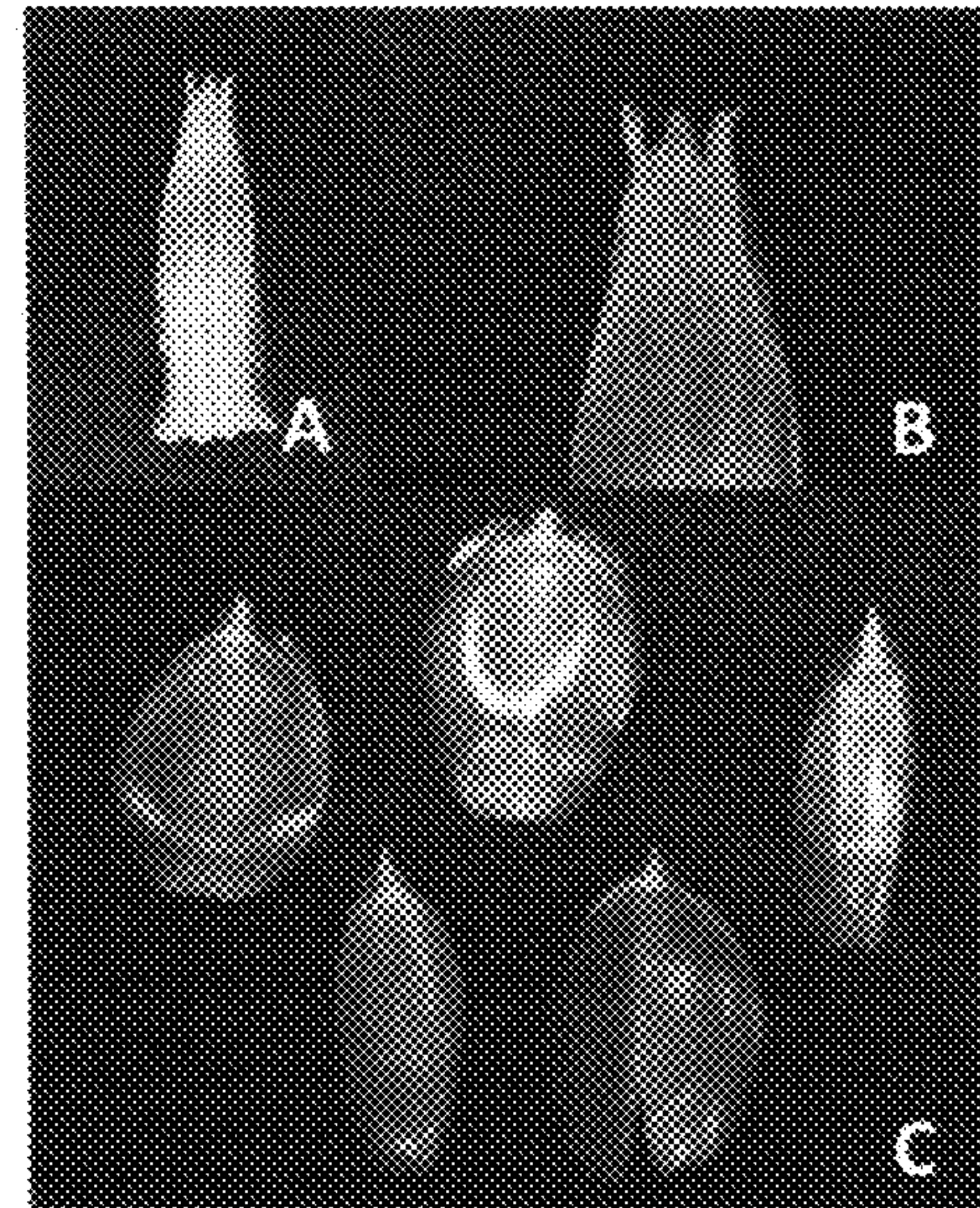


FIG. 8 A, 8B & 8C

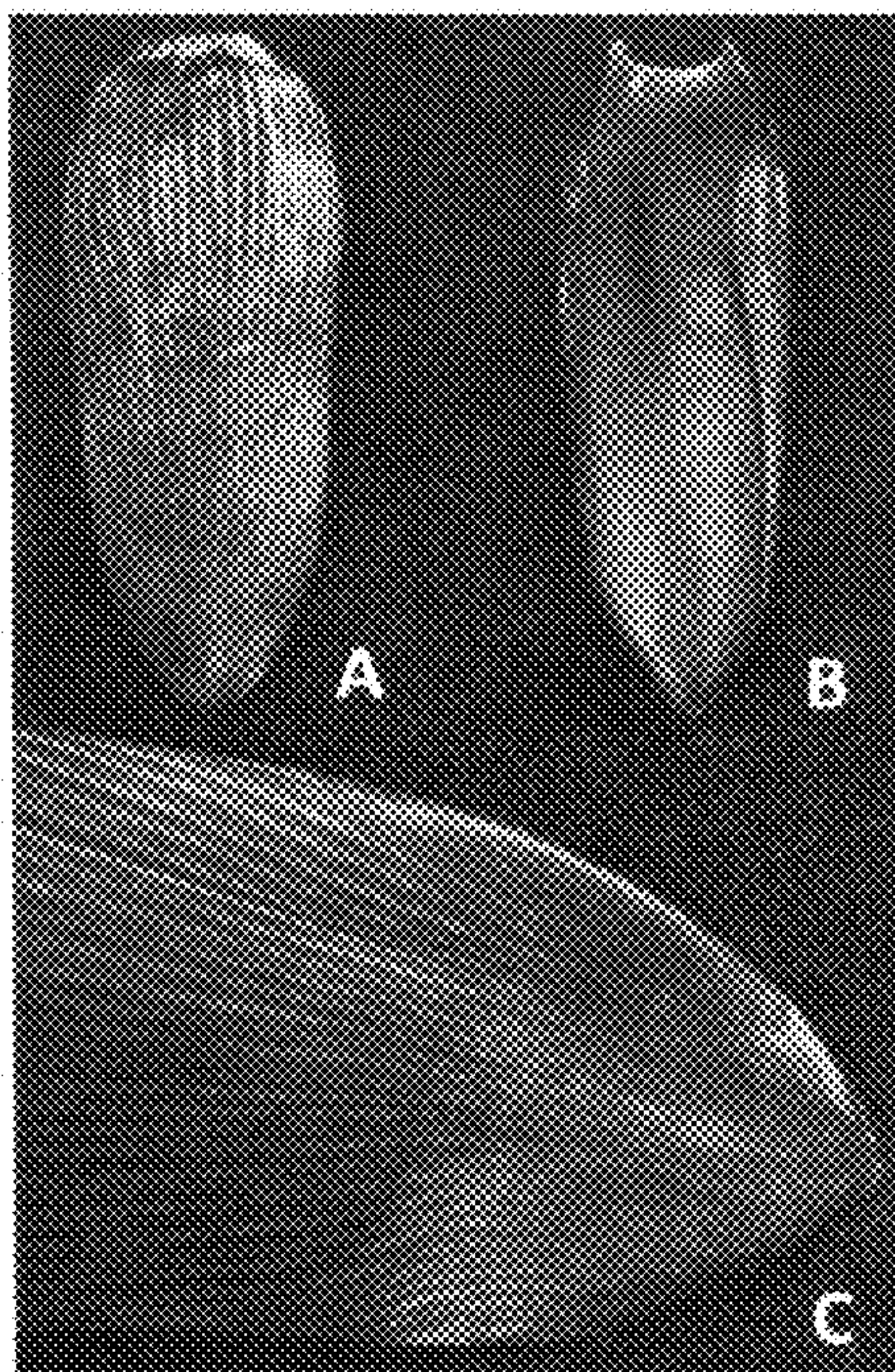


FIG. 7



FIG. 9

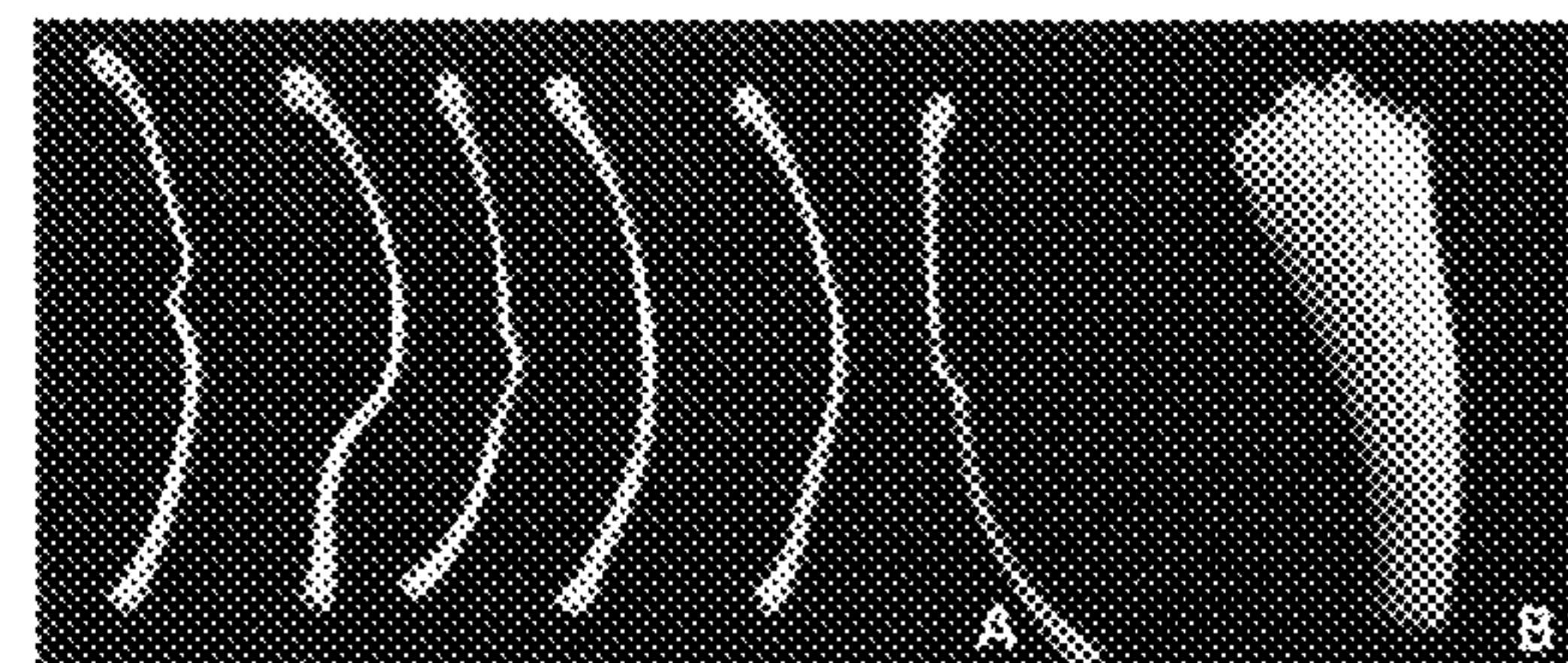


FIG. 10A & 10B

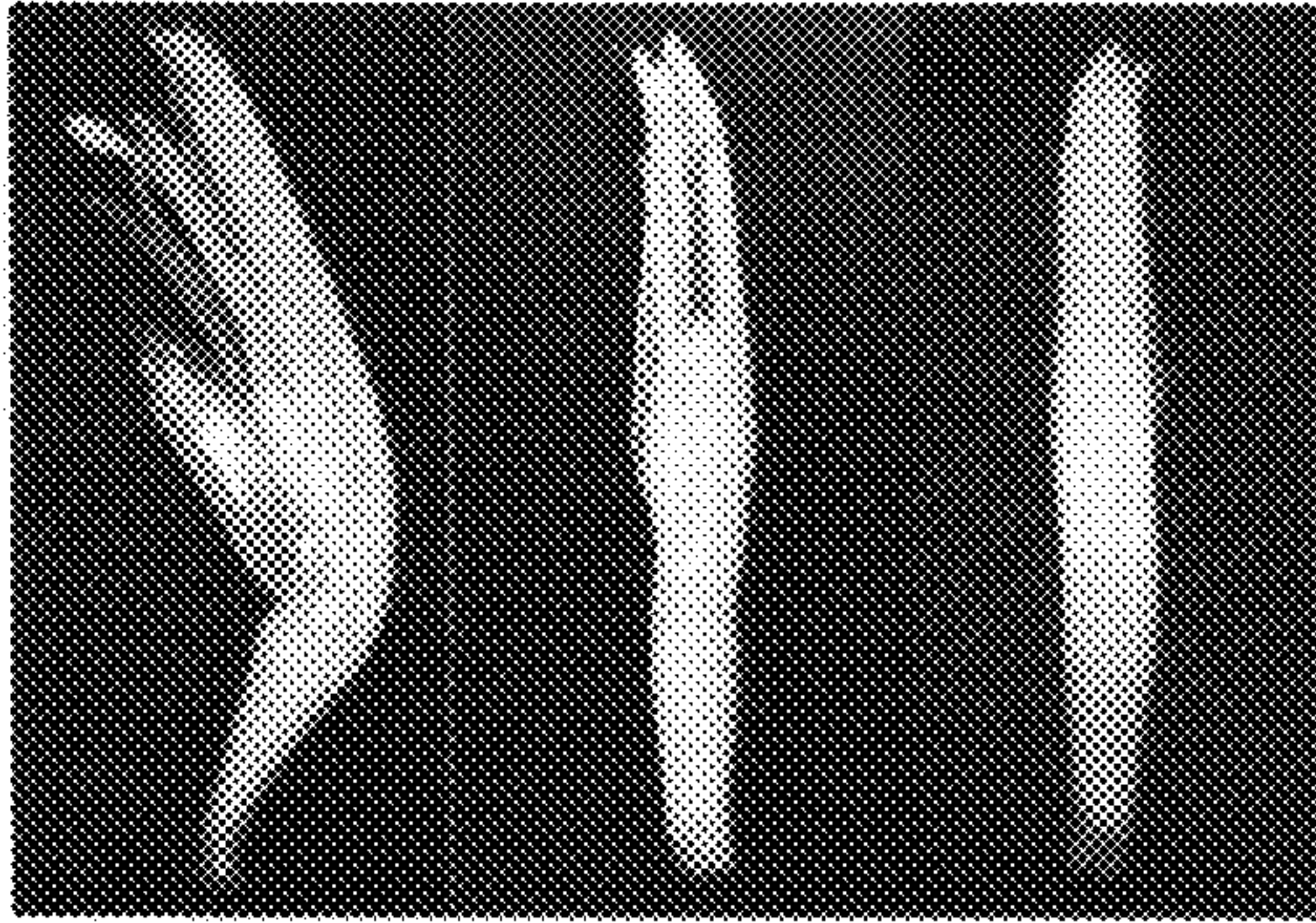


FIG. 11



FIG. 12

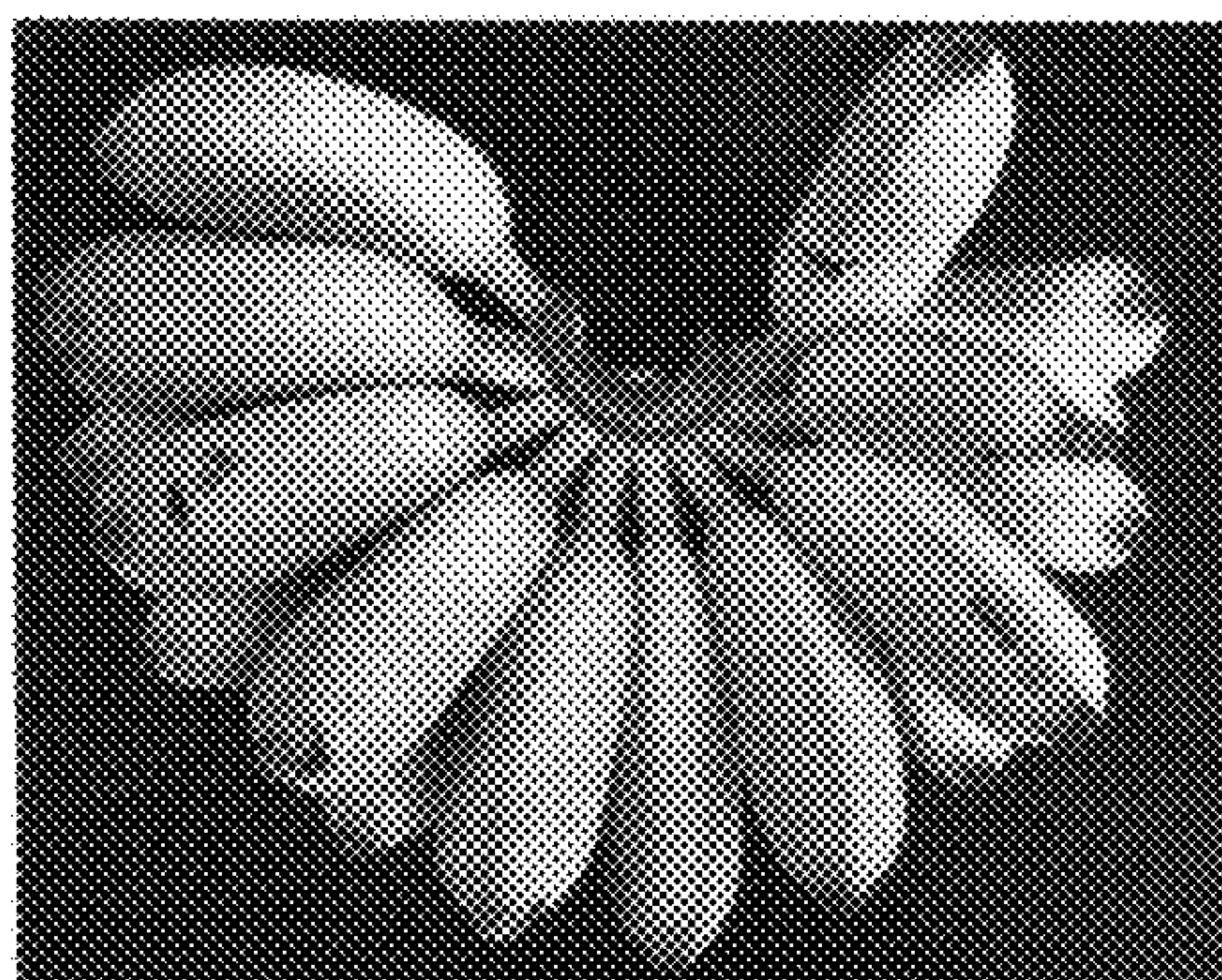


FIG. 13

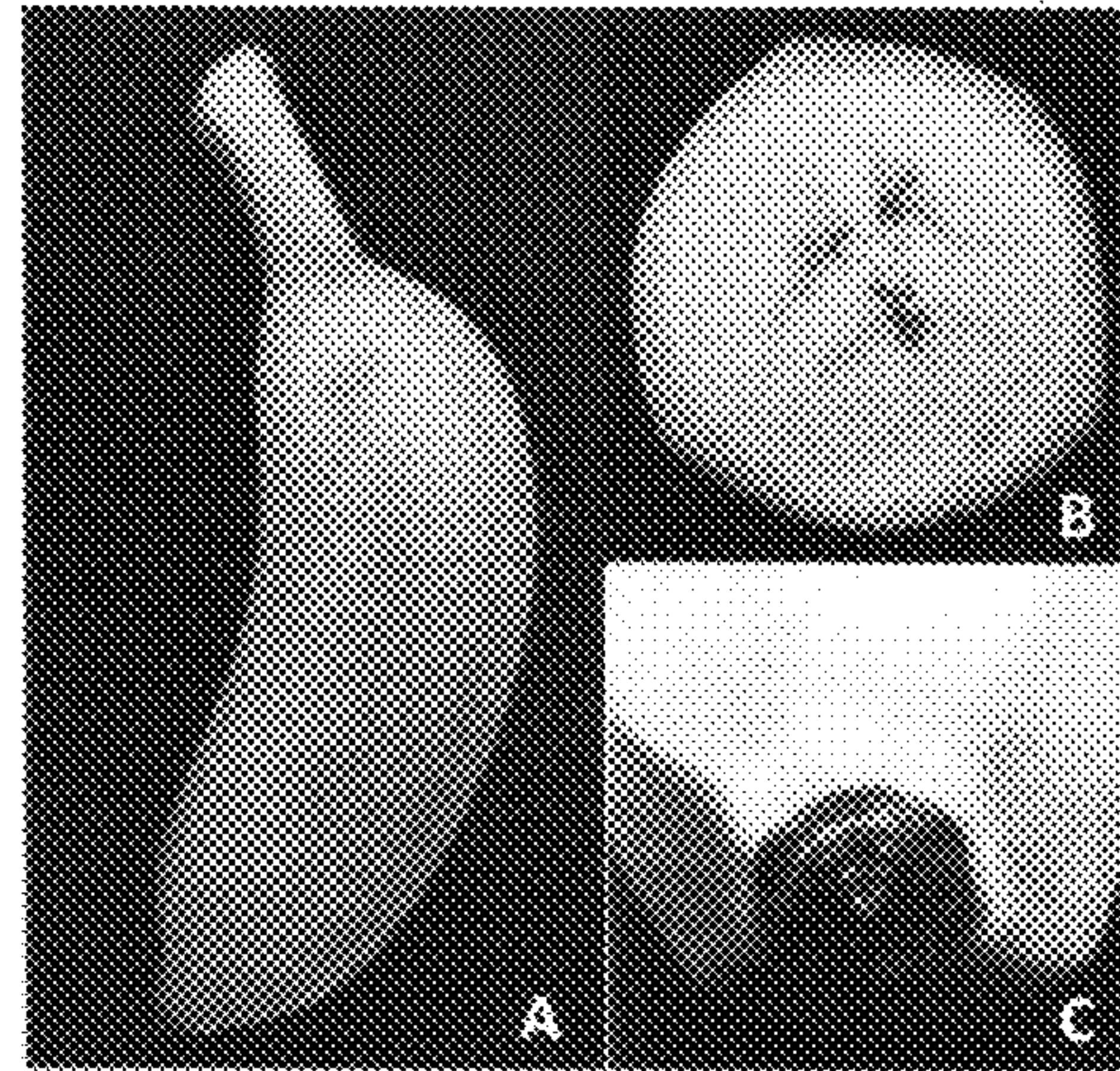


FIG. 14A, 14B & 14C

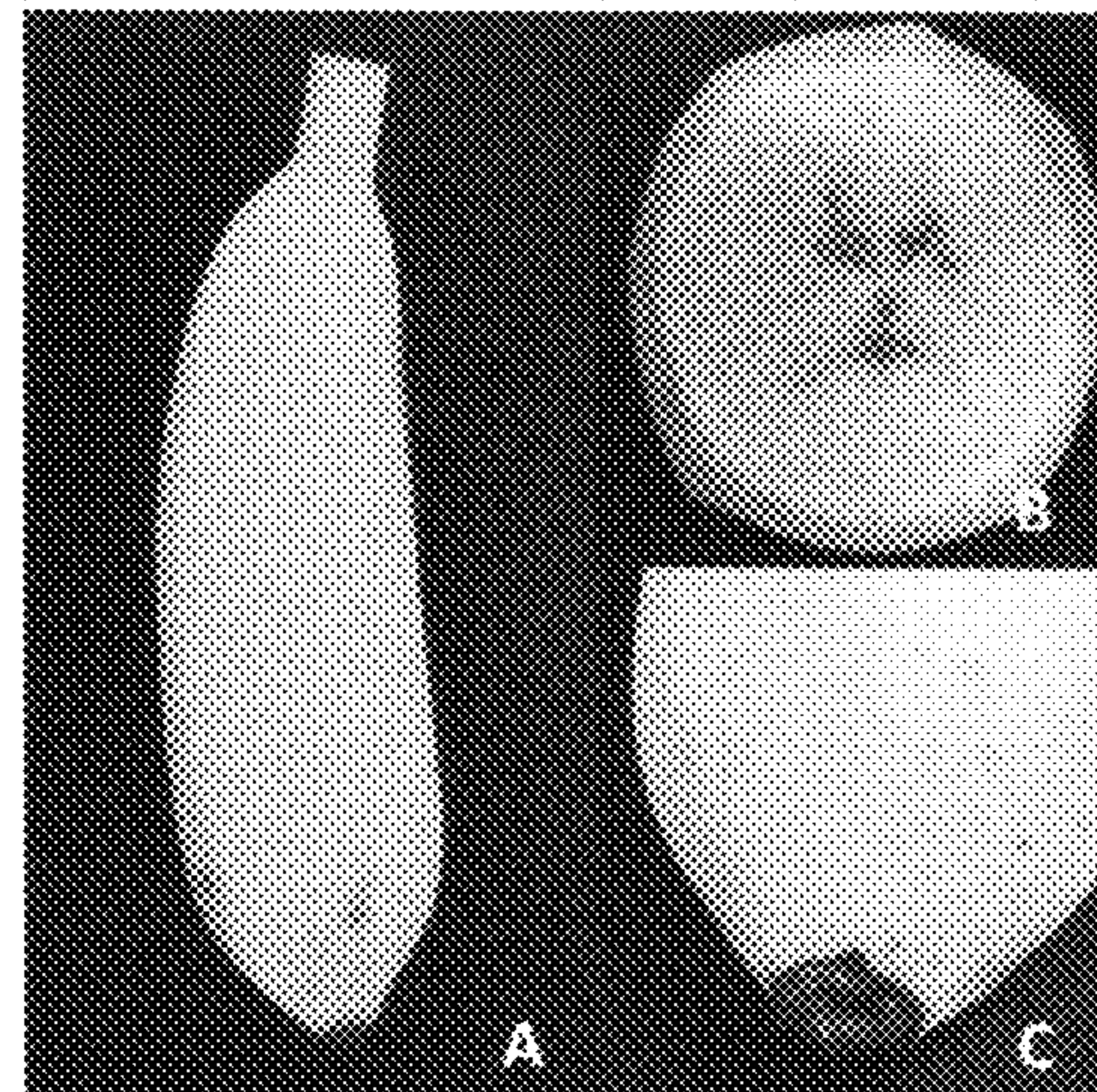


FIG. 15 A, 15B & 15C