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(12) **United States Plant Patent**
Van Swieten

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- (54) **PHALAEOPSIS ORCHID PLANT NAMED ‘PHALHORDIN’**
- (50) Latin Name: *Phalaenopsis* hybrid
Varietal Denomination: **PHALHORDIN**
- (71) Applicant: **ANTHURA B.V.**, Bleiswijk (NL)
- (72) Inventor: **Martinus Nicolaas Gerardus Van Swieten**, Utrecht (NL)
- (73) Assignee: **Anthura B.V.**, Bleiswijk (NL)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
- (21) Appl. No.: **17/005,670**
- (22) Filed: **Aug. 28, 2020**
- (51) **Int. Cl.**
A01H 6/62 (2018.01)
A01H 5/02 (2018.01)
- (52) **U.S. Cl.**
USPC **Plt./311**

(58) **Field of Classification Search**
USPC Plt./311
See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

Pluto Plant Variety Database Dec. 15, 2020.*

* cited by examiner

Primary Examiner — Annette H Para

(74) *Attorney, Agent, or Firm* — Jondle & Associates, P.C.

(57) **ABSTRACT**

A new and distinct variety of *Phalaenopsis* plant named ‘PHALHORDIN’, particularly characterized by white flowers with greenish-yellow and white lips, flower shape in lateral view is concave, margin of lateral lobe toward the tip is sinuated (with wave-like indentations), and is propagated by meristem tissue culture, is disclosed.

3 Drawing Sheets

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Genus and species: *Phalaenopsis* hybrid.
Variety denomination: ‘PHALHORDIN’.

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct cultivar of *Phalaenopsis* plant, botanically known as *Phalaenopsis* hybrid of the Orchidaceae family, commonly referred to as moth orchid, and hereinafter referred to by the variety name ‘PHALHORDIN’.

The new *Phalaenopsis* plant is a product of a planned breeding program conducted by the inventor in Bleiswijk, the Netherlands. The objective of this breeding program was to create a new *Phalaenopsis* plant with many white flowers with greenish-yellow and white lips, suitable for potted plant production.

The new *Phalaenopsis* plant ‘PHALHORDIN’ is a result of cross-pollination made by the inventor in August 2011 in Bleiswijk, the Netherlands, of the proprietary female, or seed parent, *Phalaenopsis* hybrid ‘PHALDEMCEP’ (U.S. Plant Pat. No. 28,183) with the proprietary male, or pollen parent, *Phalaenopsis* hybrid ‘01-3122’ (unpatented).

The new *Phalaenopsis* was selected by the inventor as a single plant within the progeny of the stated cross-pollination in a controlled greenhouse in Bleiswijk, the Netherlands, in July 2015. Asexual reproduction of the new *Phalaenopsis* plant by meristem tissue culture since 2016 in Bleiswijk, the Netherlands, has demonstrated that the new variety reproduces true to type with all of the characteristics, as herein described, firmly fixed and retained through successive generations.

Community Plant Variety Rights for this variety have been applied for in the European Union on Sep. 19, 2019 (Application no. 2019/2289), by Applicant who obtained the

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subject matter disclosed directly from the inventor. ‘PHALHORDIN’ has not been made publicly available or sold anywhere in the world prior to the effective filing date of this application with the exception of sales or disclosures made one year or less before the effective filing date of this claimed invention by Applicant who obtained ‘PHALHORDIN’ directly from the inventor.

SUMMARY OF THE INVENTION

The following are the most outstanding and distinguishing characteristics of this new cultivar when grown under normal horticultural practices in Bleiswijk, the Netherlands, and can be used to distinguish ‘PHALHORDIN’ as a new and distinct variety of *Phalaenopsis* plant:

- 1) White flowers with greenish-yellow and white lips;
- 2) Flower shape in lateral view is concave; and
- 3) Margin of lateral lobe toward the tip is sinuated (with wave-like indentations).

DESCRIPTION OF THE PHOTOGRAPHS

This new *Phalaenopsis* plant is illustrated by the accompanying photographs which show the overall plant habit including blooms and foliage of the plant; the colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photographs were taken in a greenhouse in Bleiswijk, the Netherlands, from 50-week-old plants in July 2020. Colors in the photographs may differ from the color values cited in the detailed botanical description, which accurately describe the actual colors of the new variety.

FIG. 1 shows the overall plant habit, including blooms and foliage of ‘PHALHORDIN’.

FIG. 2 shows a close-up of a flower of 'PHALHORDIN'.
FIG. 3 shows an overhead view of the leaves of 'PHALHORDIN'.

DESCRIPTION OF THE NEW VARIETY

The following detailed description sets forth the distinctive characteristics of 'PHALHORDIN'. Plants of the new *Phalaenopsis* have not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, light intensity and day length, without, however, any variance in genotype. The chart used in the identification of colors described herein is The R.H.S. Colour Chart of The Royal Horticultural Society, London, England, 2015 edition, except where general color terms of ordinary significance are used. The color values were determined under 4000-6000 lux natural light in a greenhouse in Bleiswijk, the Netherlands. Observations and measurements were made in July 2020 on flowering plants which were planted in 12-centimeter (diameter) pots. After in vitro propagation, the plants were grown in nursery trays for 20-24 weeks, followed by transplantation to 12-centimeter pots and grown in a greenhouse between 27° C. to 29° C. for 30 weeks, continued by a cooling period of 8 weeks between 18° C. to 20° C. and 12 weeks in a greenhouse of 21° C. Flowering occurs after 50 weeks in 12-centimeter pots.

DETAILED BOTANICAL DESCRIPTION

Classification:

Family.—Orchidaceae.

Botanical.—*Phalaenopsis* hybrid.

Common name.—Moth orchid.

Variety name.—'PHALHORDIN'.

Parentage:

Female parent.—*Phalaenopsis* cultivar 'PHALDEM-CEP' (U.S. Plant Pat. No. 28,183).

Male parent.—*Phalaenopsis* cultivar '01-3122' (unpatented).

Propagation:

Type.—Meristem tissue culture.

Roots:

Root description.—Greyed-green (something between RHS 190B and 190C) colored roots with branching lateral roots having yellow-green (something in between RHS N144A and 144C) colored root tips.

Plant:

Commercial crop time to flowering.—Following asexual propagation (in vitro), the rooted cuttings grow for 20-24 weeks. After transplantation into 12-cm pots, the plants are finished after 48 to 50 weeks.

Growth habit of the peduncle.—Upright to slightly pendent with raceme and panicle inflorescence.

Height (from soil level to top of inflorescence).—Approximately 55.0 cm to 60.0 cm.

Width (measured from leaf tips).—About 30.0 cm to 32.0 cm.

Vigor.—Strong.

Leaves:

Mature leaves.—Quantity per plant: 8 to 9 leaves are produced before flowering. Length (fully expanded): 20.0 cm to 23.0 cm. Width: 7.0 cm to 8.0 cm. Position of the broadest part of the leaf: At the middle. Shape: Oblong. Base shape: Moderately

elongated. Apex: Obtuse unequal. Leaf blade angle with the petiole (measured from the horizontal position): Between 15 degrees and 35 degrees. Leaf margin: Entire. Color: Upper surface: RHS 146A. Lower surface: RHS 146B. Texture (both upper and lower surfaces): Smooth. Thickness: 2.3 mm to 2.6 mm. Variegation: Absent. Venation: Pattern: Parallel. Color of the midvein: Upper surface: RHS 147A. Lower surface: RHS 144A.

Peduncle:

Quantity per plant.—1 to 4.

Number of flowers per peduncle.—10 to 15.

Length.—55.0 cm to 60.0 cm.

Diameter.—5.0 mm to 6.0 mm.

Strength.—Strong.

Aspect.—Upright to slightly pendent.

Texture.—Smooth.

Color.—Yellow-green (something in between RHS 144A and 146B).

Internode length.—3.5 cm to 4.5 cm.

Inflorescence description:

Appearance.—Upright to slightly pendent, raceme and panicle inflorescence with bilaterally symmetrical flowers that open in succession beginning with the lowermost flower.

Number of inflorescences.—1 to 4.

Inflorescence size.—Height (from base to tip): 240.0 mm to 300.0 mm.

Flowering time.—First flowers can be expected 10 to 11 months after planting in a 12-cm pot.

Flower.—Height: 76.0 mm to 81.0 mm. Diameter: 85.0 mm to 90.0 mm. Depth of lip: 24.0 mm to 26.0 mm.

Flower longevity.—On the plant: 13 to 15 weeks.

Flower shape.—Concave.

Fragrance.—Absent.

Flower bud.—Average size: Medium to large. Length: 23.0 mm to 25.0 mm. Width: 21.0 mm to 21.0 mm. Shape: Egg shaped. Color: Yellow-green (something in between RHS N144D and 145C) at the base.

Petals.—Arrangement: Open/free. Shape: Semi-circular. Apex: Rounded asymmetric. Margin: Weakly undulated. Length (from base to tip): 40.0 mm to 42.0 mm. Width: 51.0 mm to 53.0 mm. Position of the broadest part of the petal: Toward the base. Color (when fully opened): Upper surface: Basic color: White (RHS NN155C). Over color: Absent. Lower surface: Basic color: White (RHS NN155C). Over color: Absent. Number of spots and stripes on the petals (upper surface): None. Color of spots and stripes on the petals (upper surface): Not applicable. Density of netting of the petals (upper surface): None. Color of the netting (upper surface): Not applicable.

Dorsal sepal.—Shape: Elliptic. Apex: Obtuse symmetric. Margin: Entire. Length (from base to tip): 42.0 mm to 44.0 mm. Width: 32.0 mm to 34.0 mm. Position of the broadest part of the dorsal sepals: At the middle. Color (when fully opened): Upper surface: Basic color: White (RHS NN155C). Over color: Absent. Lower surface: Basic color: White (RHS NN155C). Over color: Hint of very light purple (RHS 76C). Number of spots and stripes on the dorsal sepals (upper surface): None. Color of spots and stripes on the dorsal sepals (upper surface):

Not applicable. Density of netting of the dorsal sepals (upper surface): None. Color of the netting: Not applicable.

Lateral sepals.—Shape: Ovate. Apex: Obtuse asymmetric. Margin: Entire. Length (from base to tip): 45.0 mm to 47.0 mm. Width: 28.0 mm to 30.0 mm. Position of the broadest part of the lateral sepals: Toward the base. Color (when fully opened): Upper surface: Basic color: White (RHS NN155C). Over color: Light yellow-green (something in between RHS 145C and 145D) at the base. Lower surface: Basic color: White (RHS NN155C). Over color: Light yellow-green (RHS 145D) at the base and very light purple midvein (RHS 76C) toward the tip. Number of spots, dots, and stripes on the lateral sepals (upper surface): Few, very small dots at the base. Color of spots, dots, and stripes on the lateral sepals (upper surface): RHS N77B. Density of netting of the lateral sepals (upper surface): None. Color of the netting (upper surface): Not applicable.

Labellum (lip).—Whiskers: Present. Length of whiskers: 20.0 mm to 22.0 mm. Color of whiskers: White (RHS NN155C) at the base with yellow tips (RHS 7A). Pubescence on the lip: Absent.

Lateral lobe.—Shape: Type V (as described in the International Union for the Protection of New Varieties of Plants (UPOV) Test Guidelines for *Phalaenopsis*); spatulate. Margin: Sinuated toward the tip (with wave-like indentations) and undulated margin toward the base (widely wavy). Length: 20.0 mm to 22.0 mm. Width: 17.0 mm to 19.0 mm. Color: Upper surface: Greenish-yellow (RHS 2A) at the base and yellow (RHS 9A) toward margin on one side; white (RHS NN155C) toward the other side. Lower surface: Greenish-yellow (RHS 2B) at the base and yellow (RHS 9A) toward margin on one side; white (RHS NN155C) toward the other side. Number of spots and stripes on the lateral lobe: Few stripes at the base. Color of spots and stripes on the lateral lobe: Something in between RHS 183D and 187D. Density of netting of the lateral lobe: None. Color of the netting: None.

Apical lobe.—Shape: Triangular. Margin: Entire. Length: 21.0 mm to 23.0 mm. Width: 24.0 mm to 26.0 mm. Color: Upper surface: Dark reddish-orange margin (RHS 175C) at the base and yellow (RHS 2A) at the middle at the base; greenish-yellow wings (RHS 2B); yellow (RHS 9A) toward tips of the wings; white (RHS NN155C) toward whiskers. Lower surface: Dark reddish-orange margin (RHS 175C) at the base; greenish-yellow wings (something in between RHS 9A and 2B); white (RHS NN155C) toward whiskers. Number of spots and stripes on the apical lobe: None. Color of spots and stripes on the apical lobe: Not applicable. Density of netting of the apical lobe: None. Color of the netting: None.

Callus.—Average size: Medium to large. Height: 7.0 mm to 8.0 mm. Length: 6.0 mm to 7.0 mm. Width:

4.0 mm to 5.0 mm. Color: Greenish-yellow (RHS 9D); yellow (RHS 9A) toward the front; dotted (RHS 178B).

Reproductive organs:

Column.—Length: 8.0 mm to 10.0 mm. Diameter: 5.8 mm to 6.3 mm. Color: White (RHS NN155C).

Pollinia.—Quantity: 2. Diameter: 0.9 mm to 1.1 mm. Color: Orange (RHS 24A).

Ovary.—Length: 9.0 mm to 11.0 mm. Diameter: 2.4 mm to 2.7 mm.

Pedicel.—Length: 39.0 mm to 41.0 mm. Diameter: 2.8 mm to 3.0 mm. Texture: Smooth. Color: Light yellow-green (RHS 145C) at the base and lighter yellow-green (from RHS 145D to 157B) toward the flower.

Disease, pest, and stress resistance: No specific resistance or susceptibility observed to pathogens and pests common to *Phalaenopsis* to date.

Fruit and seeds: Fruit and seed development has not been observed on plants of the new *Phalaenopsis* to date.

COMPARISON WITH PARENTAL LINES AND MOST SIMILAR VARIETIES

‘PHALHORDIN’ differs from female parent plant ‘PHALDEMCEP’ (U.S. Plant Pat. No. 28,183) in that ‘PHALHORDIN’ has rounded petal apexes, whereas ‘PHALDEMCEP’ has emarginated petal apexes. Additionally, ‘PHALHORDIN’ has larger flowers than ‘PHALDEMCEP’.

‘PHALHORDIN’ differs from male parent plant ‘01-3122’ (unpatented) in that ‘PHALHORDIN’ has smaller flowers than ‘01-3122’.

‘PHALHORDIN’ is most similar to the commercial *Phalaenopsis* plants named ‘PHALFOREI’ (U.S. Plant Pat. No. 28,944) and ‘PHALGOWIJ’ (U.S. Plant Pat. No. 30,300). ‘PHALHORDIN’ differs from the commercial variety ‘PHALFOREI’ in that ‘PHALHORDIN’ has peduncles that are yellow-green, whereas ‘PHALFOREI’ has peduncles that are a mix of brown and green. Additionally, ‘PHALHORDIN’ has smaller flowers and longer leaves than ‘PHALFOREI’.

‘PHALHORDIN’ differs from the commercial variety ‘PHALGOWIJ’ in that ‘PHALHORDIN’ has lips with strong curvature of the lateral lobe and lateral lobe margins that are sinuated on one side, whereas ‘PHALGOWIJ’ has lips with weak curvature of the lateral lobe and lateral lobe margins that are undulated. Additionally, ‘PHALHORDIN’ has longer leaves than ‘PHALGOWIJ’.

I claim:

1. A new and distinct variety of *Phalaenopsis* plant named ‘PHALHORDIN’, substantially as described and illustrated herein.

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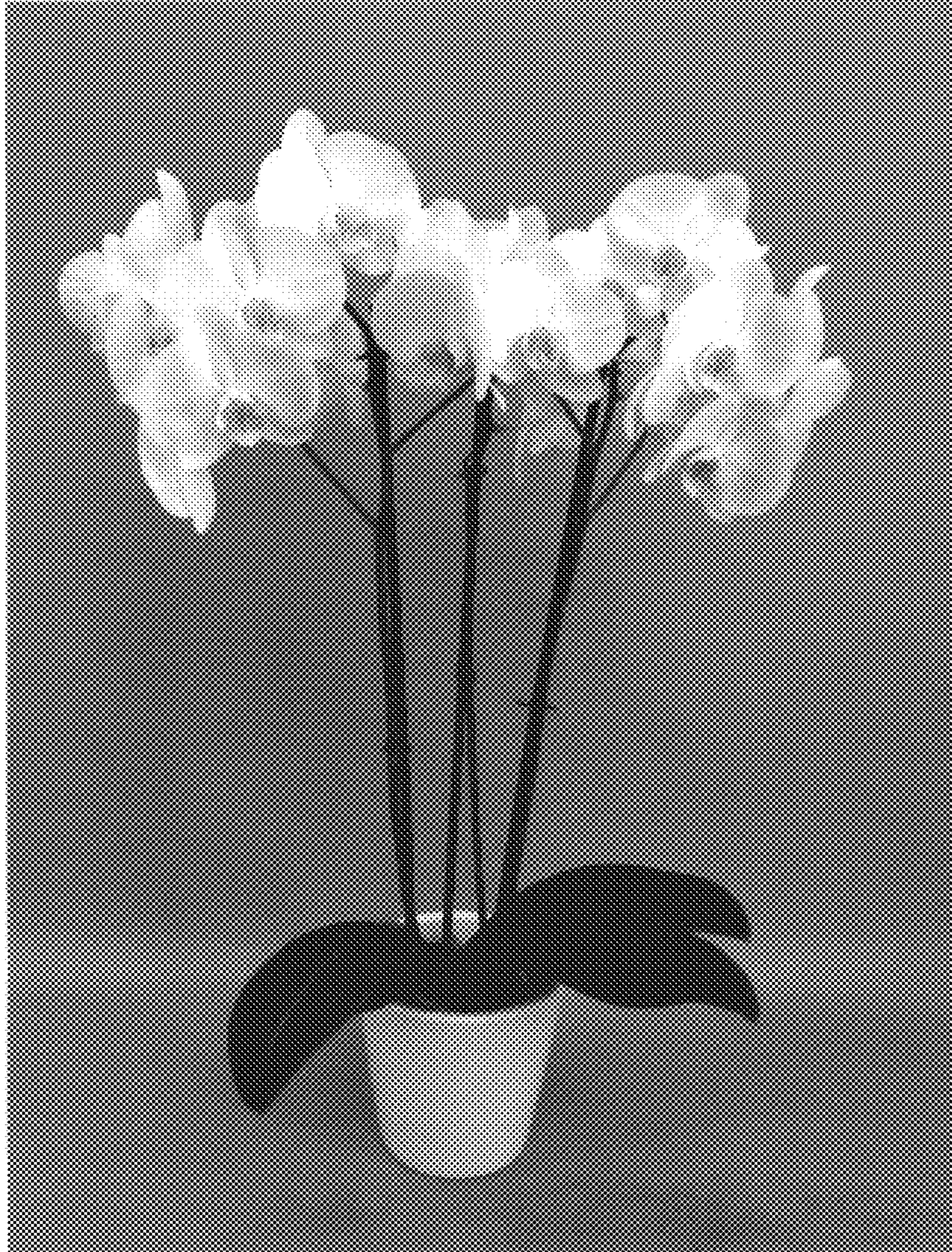


FIG. 1

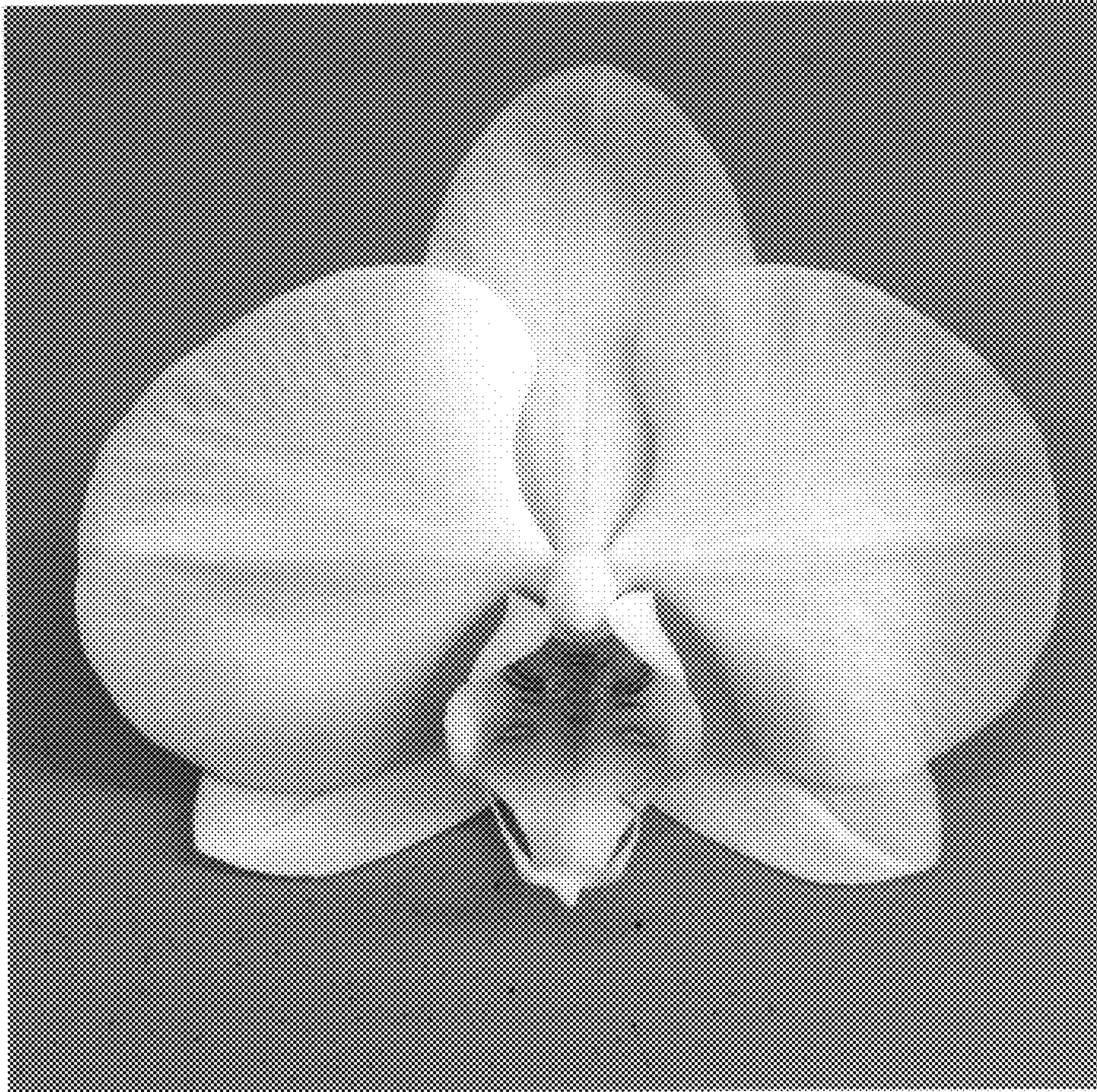


FIG. 2

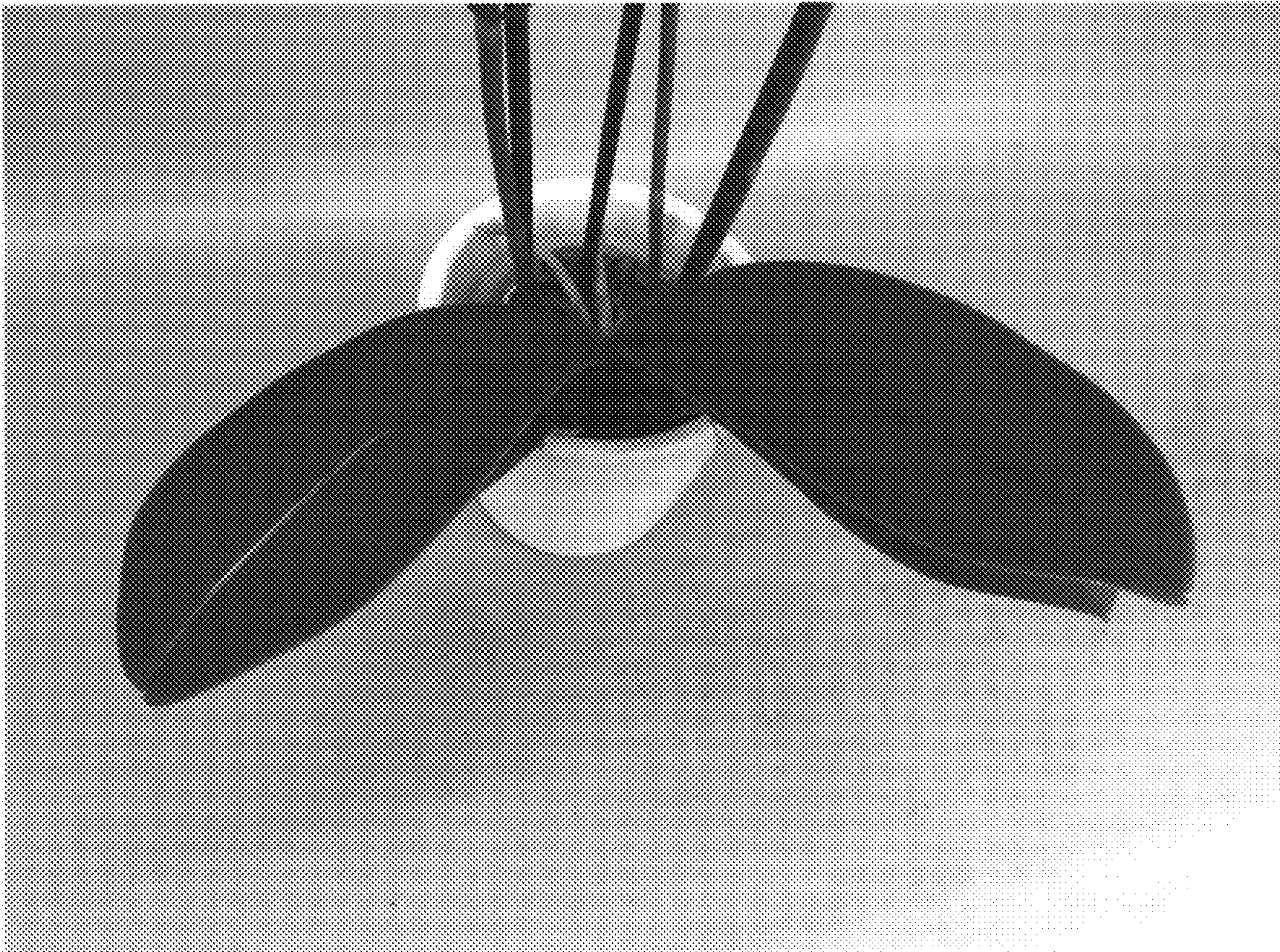


FIG. 3