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SWEET PEA CULTURE

C. C. MORSE & CO.

SAN FRANCISCO, CALIFORNIA, 1915

KING
WHITE

ILLUSTRATING THE INFALLIBLE DISTINCTION BETWEEN ORDINARY OR GRANDIFLORA SWEET PEAS AND NEW SPENCERS

The rule governing in the national Sweet Pea Society of Great Britain is that true Spencer Sweet Peas must have on "OPEN KEEL."

With this the flowers will be of large size, especially in the wings, and with wavy petals.

The top petal of a Sweet Pea Blossom is called the Standard. The two lower petals are called the Wings. The petal or envelope enclosing the pistil, stamens and anthers is called the "Keel." The real determining feature of a true Spencer, a rogue Spencer and a Grandiflora is found in the "keel." Size of the flower is not a distinguishing feature, since some varieties are smaller than others.

This is the true Spencer Type and should always bear an "OPEN KEEL." The anthers and stigma are not clamped together and the envelope of the keel is large and baggy and open at the top. This type when "fixed" will reproduce itself practically 100%, but is prone to sport to a clamped keel, even with fairly wavy petals. It will produce an average of only about one-fifth as much seed as the ordinary or grandiflora Sweet Pea under equal conditions.

This is an illustration of a "clamped keel" sport or "rogue Spencer," frequently found in the Spencer Type. The clamp is more conspicuous on the right side, or rather on one's left as he faces it. It is fairly wavy and resembles a Spencer, although usually they are smaller in size than the variety they appear in and rather less wavy. The seeds from these "rogues" will never produce a true Spencer and their progeny usually goes directly to a hooded type the second year. If for seed, the strain deteriorates rapidly and by the second generation the Spencer Type will have totally disappeared. They produce quite as much seed as the ordinary or grandiflora varieties.

This is the hooded or Grandiflora Type, and always bears a "CLAMPED KEEL." The anthers and stigma are held together compactly and are tightly enclosed in the keel. It is more conspicuous on the right side, or rather on one's left as he faces it. This type always reproduces itself exactly, so far as indicating the ordinary or grandiflora type is concerned.

If these are allowed to re-appear in the second generation the Spencer Type will have totally disappeared. They produce quite as much seed as the ordinary or grandiflora varieties.

Morse's Sweet Peas are different from others and are superior. Our Spencer Sweet Peas are rogued to the true "open keel" type.

TO ALL WHO LOVE FLOWERS

THE RAPID ADVANCE OF THE SWEET PEA IN PUBLIC FAVOR

INDICATIONS from all parts of America point to the added admiration and greater enthusiasm for the Spencer varieties of Sweet Peas. Amateur gardeners are learning that there is much more than mere labor in gardening, and with such subjects as Spencer Sweet Peas the garden becomes a delight, full of interest and laden with magnificent flowers, the only limit of perfection being according to the time and care devoted to the cultures.

In the Western States the development of the Sweet Peas has been very marked. Sweet Pea societies have sprung up in many cities and towns and exhibitions are being held all over the country. The enthusiasm has been unbounded and everything points to the crowning of the Sweet Pea as Queen of Annuals all over America and a long reign is assured.

Sweet Peas have been taken up by many school gardens, and this year in San Francisco the Glen Park school held a most successful exhibition. The interest shown by the children was remarkable and the results obtained called for admiration. Next year a school children's exhibition is planned for the Exposition, and it promises to be one of the most interesting horticultural features.

A successful Flower Show was inaugurated in Oakland this year, and the Sweet Peas exhibited were the admiration of thousands of visitors.

An exceptional opportunity will be given during the Exposition in 1915 for flower-lovers to see Sweet Peas and to learn much about them. The National Sweet Pea Society of America intend holding their annual conference and exhibition in San Francisco. The exhibition will be the most wonderful yet seen in California, and as exhibits will be made by the crack growers of the State all interested should not fail to see it. Splendid prizes will be offered for Sweet Peas and there will be classes to suit every one's garden.

Also pointing to the growth in popularity of the Sweet Pea is the work devoted to trials and the splendid bulletin issued by Professor Beal of Cornell University.

We think we are fully justified in forecasting a delightfully interesting and fascinating time for all who grow Spencer Sweet Peas in the future.

We would call special attention to the splendid novelties which we are offering this year and to the splendid collections which we make up. We were never better satisfied with the quality of the seed which we offer, and we feel our seeds will please, everywhere they are grown.

On account of the work devoted to our special strains backed up by the experience and interest of our experts we are recognized the world over as the leaders in Sweet Peas.

This book is mailed free to anyone who sends us his name and address and requests a copy.

Should you receive two copies of this Booklet we will be favored if you will kindly hand one to a friend interested in the culture of Sweet Peas.

We invite correspondence from Secretaries of Sweet Pea Exhibitions and will be glad to furnish advice to anyone proposing to start a new Society.

SPECIAL ANNOUNCEMENT

PRIZES FOR SWEET PEAS

At the Exhibition of the American National Sweet Pea Society there will be special prizes offered for Sweet Peas. No garden will be too small to be able to grow enough blossoms for some of our prizes and none will be too large. Our leading prize will be for our "1915 Exposition" Collection (see page 15). There will also be numerous prizes and medals offered by the National Sweet Pea Society.

Full particulars of the Exhibition will be announced later and schedules can be had by applying to us. Any information desired will be cheerfully given.

Here is a chance to win distinction and make the memory of the Exposition a delight.

Keep in touch with us.

C. C. MORSE & CO.'S SPECIAL PRIZES

In addition to the special prizes to be offered by the American Sweet Pea Society, we will ourselves offer the following Extra Cash Prizes for fine Sweet Peas grown from Morse's 1915 Exposition Collection of Sweet Peas. This collection contains eight magnificent varieties, and is described on page 15. Each exhibitor must stage six flowers of each of those eight varieties.

CHILDREN'S EXHIBITION

will be held at C. C. Morse & Co.'s booth in the Horticultural Building at the Panama-Pacific Exposition on Saturday, May 24, 1915. Age is limited to 16 years.

PRIZES—First Prize, \$10.00; Second Prize, \$5.00; Third Prize, \$3.00; and five additional Prizes of \$1.00 each.

CHALLENGE EXHIBITION

will be held at C. C. Morse & Co.'s booth in the Horticultural Building at the Panama-Pacific Exposition on Saturday, May 31, 1915.

PRIZES—First Prize, \$25.00; Second Prize, \$10.00; Third Prize, \$5.00; and five additional prizes of \$2.00 each.

RULES

Application for entry must be made in writing to C. C. Morse & Co., 48 Jackson Street, San Francisco, California, seven days before the date of the Exposition.

All exhibits must be staged before 11 a. m.

All Sweet Peas exhibited must be legibly named on white cards, which we will supply for the purpose.

Vases will be provided for the exhibits.

Competent judges will be appointed, who will use the American Sweet Pea Society's scale of points mentioned in next paragraph.

HOW SWEET PEAS SHOULD BE SET UP FOR EXHIBITION AND HOW THEY WILL BE JUDGED

Sweet Pea foliage only should be used, with flowers unattached. About three pieces in a vase are sufficient and these should be short. The flowers should be

Photo of our Exhibit of Margaret Atlee Sweet Pea at the National Sweet Pea Society of Great Britain's Exhibition, July, 1914. AWARDED A SILVER MEDAL.

arranged as upright as possible and arranged loosely, so that each flower stands out by itself. No wiring is allowed. The blossoms should be arranged so that each one will face the judge as near as possible. If the class calls for several vases, careful consideration must be given to blending of color or suitable contrast. The judge's eye must be "caught," and it is wonderful how one color will help to show off another.

If staging is not provided at the show use flower pots or wood blocks to raise the back rows of vases above the level of the front ones.

The American Sweet Pea Society suggests that an ideal bunch of Sweet Peas consists of not more than 25 sprays.

Less sprays, however, will often be more than sufficient if quality is right.

Coarse flowers placed far apart on long stems should never be taken into consideration with stems which are of less length and have large blossoms nicely placed at short intervals.

This is the American Sweet Pea Society's Scale of Points to Govern Judges:

Length of Stem.....	25
Color	20
Size	25
Substance	15
Number of Flowers on a Stem.....	15
Total	100

CULTURE OF THE SWEET PEA

The Sweet Pea finds in the Western States an agreeable soil and climate and those who have given a little extra attention to the cultivation of Sweet Peas have produced flowers which compare favorably with the best produced in any part of the world.

PREPARATION OF THE GROUND FOR GENERAL CULTURE

The proper time to spade over the garden is in the early Fall, as the longer the soil can be left turned over and in a rough state, the better.

Presuming the place intended for Sweet Peas has been selected, the part to be spaded over should be marked off at least two feet wide. Give a liberal dressing of well-rotted farmyard manure, bone-meal and a dusting of lime if the soil is deficient.

First of all, make the hole about a foot deep and not less than two feet wide, taking the soil to the other end of the plot. This hole is made to insure good digging. The spade should be pushed straight down to its full depth, about six inches from the face of the hole. Lever it back by the handle, lift up the spadeful of soil and throw it into the hole taken out and proceed right along. See to it that the rough surface after digging is uniformly level, but do not chop the soil down fine until planting time.

If a jobbing gardener is employed, see that his digging is thorough and that the spade is pushed in straight and not at an angle of 150 degrees, as is often done. Good deep digging is the great secret to successful Sweet Pea growing.

SOWING THE SEED

A few of our customers have asked us why it is that their Sweet Pea seeds will not start, as the seed is apparently quite sound. This is not an uncommon occurrence with some varieties for this reason: Many varieties have a very hard seed coat which prevents the moisture getting in to the seed for a long time. The moisture must get into the seed to start the process of growth. To facilitate the moisture getting in, a small piece of the seed-coat may be clipped off with a sharp knife, or file a small notch in the seed-coat on the side opposite the eye or sprouting point of the seed.

Growers can easily recognize hard coated seeds from their bullet like appearance.

SOWING THE SEED IN THE OPEN GROUND

In the open ground, November and December are the best months to sow Sweet Peas, but they can be sown at any time as long as the ground remains in condition. By the month of November or December the ground will have had considerable rain and if a nice day is chosen it will be found that the lumps will break down nicely. The trench should then be well firmed down by treading. See that the soil is not too moist when this is done. The Sweet Pea likes a deep soil but also a firm one.

The seed should be sown about an inch deep and sown thinly. Whenever the plants are well up they should be thinned out to a foot or eighteen inches apart. It is a great mistake to leave too many plants in, as the overcrowding is sure to result in poor flowers.

SOWING THE SEED IN POTS

Procure some three and one-half inch pots, and see that they are thoroughly clean inside; if not, rub with a piece of sack or straw. Over the hole in the bottom place a piece of broken pot and cover with some leaf mould, or some such loose material; old turf with soil shaken out does admirably. This insures good drainage. The compost for the pots should be loam, leaf mould, a little sand and a dusting of lime. A sprinkling of bone meal will also be helpful. The whole should be well mixed and should be fairly dry. Fill up the pots and press down the soil gently to within half an inch of the top.

With a blunt dibble, about the thickness of a pencil, make three holes about three-quarters of an inch deep and in each place a seed and cover with soil. For the smaller seeds of lavender varieties half an inch or less is sufficient depth. After sowing label each pot with the name and variety it contains.

The pots should then be placed in a cold frame and watered. The bottom of the frame should be covered with old ashes or loose material to insure good drainage. The treatment afterwards is simple. The pots should never be allowed to get dry but must never get sodden. The frame should be covered during cold or frosty nights with a lath frame to keep out the frost, but it should be taken off during the day. The great secret is to keep the plants hardy and not "coddle" them.

Sowing in pots should be done in the fall.

When the plants are large enough, a few twigs should be stuck in the pots to enable the tendrils to cling.

Planting out may be done in January or February in California, and later where there is danger from frost. For giant exhibition flowers try to get the seed in the ground before December 1. Choose a time when the ground is moist. If the whole potful is to be planted intact, plant the potfuls two feet apart. The plants, however, may be easily separated and planted a foot or eighteen inches apart.

SOWING THE SEED IN PAPER POTS

For those who have not space to give to the ordinary pot, we can thoroughly recommend the "*Grant Paper Pot*." This is a square paper pot and several dozen can be placed compactly in a wooden box. Sow one or two seeds in each pot and when planting out time comes, just cut down one corner of the pot, if not thoroughly rotted. After planting, what paper is left will soon rot away.

The price for Grant Planting Pots is 10c per 10; 85c per 100 for 3", to which must be added postal charges.

CARING FOR THE PLANTS

As soon as the plants are about three inches high the center should be pinched out, as the later growths make much finer plants. Put some small twigs around them, to which the young tendrils may cling. When they reach six inches in height, it is time to give them permanent support.

There are several ways and means of supporting Sweet Peas. The best and most natural way is to get some fine broad tree bough with plenty of twigs. Hazel boughs are excellent. If the Sweet Peas grow at all well, 5 or 6 feet boughs will be necessary.

Another very good way to support the vines is by means of wire netting. We have found that a very coarse netting with about 4" mesh does very nicely. This coarse netting can be had in 5 feet widths and by setting it a foot off the ground, a 6-foot height can be attained. It should be arranged that the wire is put on the

side away from the wind so that the plants will blow on to the netting. Along the side of the row, drive in some stout stakes. These stakes should be at least one foot in the ground and 6 feet out of the ground. Intervals of about eight feet should be left between the stakes. Fasten the netting to the stakes by staples. The end stakes will want to be braced against the pull of the netting.

Yet another means of support can be made by driving in stout stakes and stretching strong strings between them as the plants require the support.

Should it not be convenient to plant the Sweet Peas in rows, a very pretty effect can be had along a sidewalk, or garden path, by planting clumps at intervals following the same cultural directions and leaving about three plants to a clump. A clump should be about 2 feet in diameter. The vines can either be supported by a circle of wire netting or by stakes and string.

After the last rains the Sweet Pea ground should be well hoed, and mulched with old stable manure, or if this cannot be done, the soil must be constantly hoed during the summer and kept loose for several inches in depth to prevent cracking and loss of moisture.

By the month of May the plants will be ready for some water, as they will have grown several feet high. Watering will be needed every day or so, and it is best done in the evening. Examine the row often to see whether or not any shoots require training into position. This is important not only because the row will look better, but because it keeps the growths going straight, therefore straight stems will be the result.

The flowers should not be allowed to wither on the plants, but should be constantly cut off. This will greatly prolong the blooming season.

PREPARATION OF THE GROUND FOR EXHIBITION FLOWERS

First of all mark off the ground as long as desired, not less than two feet wide. Over this portion scatter a liberal coating of well rotted farmyard manure and a good dressing of bone-meal. Do not stand aghast if we say the ground should be trenched about two and one-half to three feet deep, if first-class flowers are desired. This does not take long in the narrow plot. First of all, dig a hole at one end of the plot, a foot deep and two feet long, wheeling or carrying the soil and placing it in a heap near the other end of the plot. Then stir up the soil at the bottom of the hole to the depth desired and mix in some manure. Proceed to turn over the next two feet of top soil on the top of the subsoil that has been moved. Again stir and break up the subsoil where the top soil was taken out, and so on repeat the process until the distance is covered. Of course there will be the hole at the finish, which will be filled up with the soil taken out at the beginning. By this method a good trench is prepared and the subsoil left below.

The ground, where turned over, should be left as rough as possible so that rain and air can operate on it freely.

TREATING PLANTS FOR EXHIBITION FLOWERS

The center growth should be pinched out of the young plant when about three inches high. If two lateral growths are allowed to grow, fine blossoms will be had. Some professionals only keep one lateral. The lateral growths are always more vigorous than the center or original growth. The plants should be staked by either method already described but a greater height allowed for the growth of the plant. The surface of the ground around the Sweet Peas should be kept moist and a syringing of cold water in the evening keeps the growth healthy.

FERTILIZING

If extra large flowers are desired, or if the soil is light and poor, it will benefit the plants to have some feeding. This is best applied in liquid form, Feeding should not be done before the plants are well up and in first bloom.

A very good liquid manure can be made by taking a sack of sheep or cow manure and soaking it in a tub or barrel of water. Stir the liquid well before using and take one quart of the liquid to a six-gallon can of water. Before giving the manure, water the plants first with pure water. Once or twice a week will be often enough to feed.

Another good liquid food can be made from putting a sack of soot in a tub or barrel and using in like manner to the above. The soot helps bring out the colors.

We must warn growers against overfeeding. It will make the growth rank, and poor flowers instead of good ones will be the result.

Many growers use chemical manures dissolved and diluted, the commonest being Nitrate of Soda, but it has to be used with great caution. Keep the liquor manure off the vines and apply it in the evening.

Perhaps towards August the plants will show signs of being spent, the blooms getting smaller; do not give them up, but cut them down to within three feet of the ground, water well, and give them a good dressing of fertilizer. The plants will shoot out afresh and give some nice blooms for late use.

SHADING

Hitherto American growers have known little of this process, but there are now so many beautiful shades in Sweet Peas that "burn" badly in the strong sun that in order to get the full beauty of the flower the grower has to shade the plant. It takes very little to give sufficient shade and light cheese cloth or heavy netting is the best material to use. This should be stretched over the top of the wire netting by means of light wooden bars, above the varieties to be shaded. It really is very little trouble to shade a variety and the results will repay the grower a thousand times over. Examples of varieties that have to be shaded are, Thomas Stevenson, Stirling Stent, Charles Foster and Afterglow.

INSECT TROUBLES

We know of no plant that is so free from the attacks of insects or diseases. The only insects troubling Sweet Peas are the Red Spider and Green Aphis. These former are easily disposed of by syringing or spraying with pure water. If the insects have gotten very bad use Whale Oil Soap or Sulpho Tobacco Soap in the water. Also a solution of Black Leaf 40. We carry several different insecticides for these very pests, the use of which we should be glad to explain.

BUD-DROPPING

We have occasional inquiries about bud-dropping in Sweet Peas. This generally can be attributed to one or other of the following causes:

If the soil was not well firmed after spading bud-dropping will often take place. Tread the soil down well all around the plants.

Sometimes too much water will cause bud-dropping, especially if applied every day or so. The best way is to water only when needed and to then give a good soaking. Keep the top soil well hoed afterwards around the plants.

Excessive feeding with commercial fertilizers, especially in liquid form, will cause the buds to drop, and if there is an excessive amount of nitrogen in the soil the same thing will happen. Such cases can be controlled somewhat by an application of lime during spading time or a watering with lime water during the growing period.

MORSE'S SWEET PEA NOVELTIES FOR 1915

JESSIE CUTHBERTSON SPENCER—Those growers who like a good stripe in their collection—and one or two are necessary in every collection—will welcome this grand addition. In the days of popular Grandifloras Jessie Cuthbertson was the favorite stripe, and our efforts to produce a Spencer form of this variety have now been rewarded with a fine large vigorous flower. The ground color is rich cream overlaid with stripes and marblings of bright rose pink. Both standard and wings are alike colored and the whole effect is bold and pretty.

Per packet of 25 seeds, 15c.

HELEN PIERCE SPENCER—In 1905 we introduced the Grandiflora Helen Pierce, which met with great favor and which was awarded a First-Class Certificate by the British National Sweet Pea Society and an Award of Merit by the Royal Horticultural Society.

We have now fixed this variety in true Spencer form. It is a most attractive flower and reminds one of a blue mottled Gloxinia. The ground color is white marbled and penciled with bright blue in thin lines on both wings and standard. The vines are vigorous and produce an abundance of strong stems carrying invariably four large blossoms. We are the first growers to introduce a fixed strain of true Helen Pierce Spencer.

Per packet of 12 seeds, 25c.

VEILED BRIDE—This is a charming novelty which we have been working on for years, and which is now perfected and fixed. The ground color is white, daintily flaked and marbled with soft rose pink. The wings and standard are alike colored. The form of the flower is all that could be desired, the standard being nicely waved, round and bold. When a bunch of this variety is gathered one must call it "Sweet," the delicate markings of pink being daintiness itself. Our field description of this was Pink Helen Pierce Spencer.

Per packet of 12 seeds, 25c.

NEW MIRIAM BEAVER—This is undoubtedly our star novelty for 1915. Many and varied are the shades of pink in Sweet Peas, but in New Miriam Beaver we have an entirely new and distinct shade of pink. It is the daintiest and most pleasing shade of pink yet discovered in Sweet Peas. The color is hard to determine, but we think that a soft shell salmon pink on cream ground lightly overlaid with soft hydrangea pink would convey a good idea of its uniqueness.

The color is evenly distributed over both standard and wings and is very light and pretty.

The flowers are large, nicely waved—often duplexed—and beautifully placed on long stout stems. All other pinks look "heavy" beside this delightful shade. New Miriam Beaver will be the ladies' favorite wherever Sweet Peas are grown, and we are justly proud of this addition from our workshop.

Per packet of 12 seeds, 25c.

ROYAL PURPLE (Dobbie's)—The color is as the name describes it—a rich royal purple. The vines are exceptionally vigorous and long, stout stems carrying four large blossoms is the rule. The color is held throughout the life of the flower and at no time does an objectionable blue purple color show up.

We had this variety in our trials this year and were so much struck with it that we procured some from the raisers. The color can be used effectively in striking contrasts.

Per packet of 25 seeds, 25c.

NEW MARGARET MADISON—In New Margaret Madison we have a greatly improved strain of the popular lavender color found in our variety Margaret Madison. The size of the blossom has been almost doubled and the form of the flower is now all that could be wished for in a Spencer Sweet Pea.

The color, too, is daintier and prettier and is as near a *true lavender* as one could wish. The vines are very vigorous and the bold flowers are borne on long, stout stems and usually four blossoms to each stem. New Margaret Madison and New Miriam Beaver make a delightful soft color combination. Many seedsmen have listed a Margaret Madison under different names, but like our first introduction, all gave a few white "rogues." We are the first growers to perfect this handsome variety and our strain is absolutely fixed.

Per packet of 40 seeds, 25c.

ROBERT SYDENHAM (Holmes)—One of the most individual colors introduced into the modern Sweet Pea. It is a bright orange salmon self-colored, rather lighter than the Stirling Stent and deeper than Melba or Barbara. It is of immense size and owing to its soft texture needs a little shading during the middle of the day. It is a grand acquisition and created a great sensation when exhibited at the Great Annual Exhibition in London. We have engaged a large part of Mr. Holmes' entire output for the season, but owing to the great demand can offer it only in small packets.

Per packet, 50c.

LAST YEAR'S NOVELTIES

NEW SWEET PEAS FOR 1914

KING WHITE—Sweet Pea enthusiasts have long been waiting for a pure white Sweet Pea but none expected such an advance as King White marks. Not only because of the glistening immaculate purity of the whiteness, but because of the perfect finish of the flower in every detail, King White attains perfection in every detail which goes to make up a Spencer Sweet Pea. The improvement in form, size, vigor, waviness and purity stands eminently out when compared to other White Spencers and calls for unstinted admiration. The number of four-blossomed sprays and the great length of stem will appeal strongly to those wishing a good white for decorative work.

King White has been awarded the Award of Merit of the British National Sweet Pea Society and Certificate of Merit from the Pennsylvania Horticultural Society.

We have pleasure in illustrating King White on front cover of this Booklet.

Per packet of 25 seeds, 25c.

ILLUMINATOR—A glorious orange salmon Sweet Pea. In dull light the color appears to be a "flat orange scarlet," but when in brilliant sunshine or under artificial light, the color is completely changed. It appears to be a bright salmon cerise, sparkling with orange. When seen at its best one has to call it "glorious," fully appreciating the meaning of the adjective.

Illuminator introduces a new shade of color, to Sweet Pea enthusiasts, of rare beauty and with its additional attributes of great vigor, floriferousness and symmetry, it is sure to captivate all who give it a place in their garden.

Awarded Certificate of Merit by the Pennsylvania Horticultural Society.

Per packet of 25 seeds, 15c.

MARGARET ATLEE—This was our leading novelty last year and it has proved to be a great favorite. We have received numerous expressions of appreciation from experts all over the world. The color is warm salmon pink, perfectly suffused over a cream ground. The cream deepens into bright buff at base of standard and wings and this lights up the flower with great effect. The shade of pink found in Margaret Atlee is entirely a new shade and commands admiration. The flowers are of extraordinary size and we measured many flowers two and one-half inches across the standard.

This variety bears a large proportion of duplex flowers which greatly adds to its effectiveness.

Margaret Atlee gained a Certificate of Merit from the American National Sweet Pea Society. Silver Medal, National Sweet Pea Society of Great Britain, July, 1914.

We would draw attention to the beautiful examples of Margaret Atlee on the back cover of this Booklet. Per packet of 25 seeds, 25c.

GENERAL LIST OF SWEET PEAS

Abbreviations: G means Grandiflora; SPENCERS are printed in black face capital letters.

NOTE: We have revised our list to bring it up to date and possibly in doing so have omitted some well known favorites. We shall be only too glad to advise customers of the new varieties which are improvements on any name which is now omitted.

AFTERGLOW—New pastel shades. Base of standard bright violet blue, shading to rosy amethyst. Wings, electric blue. Requires shading.

Per packet, 15c; oz., 60c.

AMERICA SPENCER—White ground, heavily striped and flaked with bright crimson scarlet. A large, bold flower of splendid form.

Per packet, 10c; oz., 35c.

APPLE BLOSSOM SPENCER—Very large bold flower of best Spencer form. Standard very bright rose, wings primrose with flush of rose tint. A grand robust variety.

Per packet, 10c; oz., 35c.

ASTA OHN—The best lavender Sweet Pea. Is more truly a soft pinkish lavender self. Flowers are very large and beautifully waved. A very charming variety.

Per packet, 10c; oz., 35c.

AURORA SPENCER—Flowers white, mottled and flaked with bright orange pink. Splendid Spencer form and nicely waved. A very pretty flower and one of the finest and largest Spencers.

Per packet, 10c; oz., 35c.

BERTRAND DEAL (Improved)—Large rosy lilac of great vigor. Flowers of splendid form and substance. Very fine for cutting. Per packet, 15c; oz., 60c.

BLANCHE FERRY SPENCER—A giant type of Spencer form, with rose standard and wings white, suffused and tinted with light pink.

Per packet, 10c; oz., 35c.

CAPTAIN OF THE BLUES, or WAVERLEY SPENCER—Pure purple. The margin of the petals is marbled. Very large and distinct.

Per packet, 10c; oz., 35c.

CHAS. FOSTER—Companion pastel shade to Afterglow. General effect mauve pink, sometimes described as hydrangea pink. Color deepens towards center. Very pretty when shaded.

Per packet, 15c; oz., 60c.

CLARA CURTIS—A beautifully waved cream, good substance, stems usually have four large flowers—a superior strain of Primrose Spencer.

Per packet, 10c; oz., 35c.

CONSTANCE OLIVER—Cream ground, beautifully suffused with pale orange pink. A vigorous grower, flowers large and wavy. Per packet, 10c; oz., 35c.

COUNTESS SPENCER—The original giant flowered Spencer, with finest waved standard and wings clear pink, deepening somewhat towards the edge, but almost self colored. Still one of the best Sweet Peas of today.

Per packet, 5c; oz., 35c.

DAINTY SPENCER—Very large Spencer, splendid form, white ground, with beautiful picotee edge of rose pink. Per packet, 10c; oz., 35c.

DORIS USHER—Large salmon pink on cream ground. A beautiful pink for exhibition and garden work. Per packet, 15c; oz., 75c.

Dorothy Eckford (G)—Best grandiflora white. Per packet, 5c; oz., 20c; ¼ lb., 50c.

ELFRIDA PEARSON—Giant pale pink on white ground. Plants exceptionally vigorous. Most useful pink for decoration and exhibition.

Per packet, 15c; oz., 60c.

ETHEL ROOSEVELT—Light buff primrose, with light pink flakes and stripes. Per packet, 10c; oz., 35c.

ETTA DYKE—A beautiful white of best Spencer form. Same as Morse's Strain of white Spencer. Per packet, 10c; oz., 50c.

FLORA NORTON SPENCER—Very nicely waved. The color is bright blue with tint of purple. Per packet, 10c; oz., 35c.

FLORENCE MORSE SPENCER—Standard richly flushed with a beautiful and distinct shade of pink; wings soft blush pink, giving the flower a charming appearance; very large and wavy. One of the prettiest of Sweet Peas.

Per packet, 10c; oz., 35c.

GAIETY SPENCER—The best bright colored stripe in existence. This is really a handsome Pea. The color is bright rose crimson, striped and splashed on ivory white. Very vigorous and four flowers to each stem.

Per packet, 10c; oz., 35c.

GEO. HERBERT—A large Spencer rose crimson, suffused with magenta and showing veins in wings. Per packet, 10c; oz., 35c.

HELEN LEWIS—A very large and fine orange salmon pink, with especially bright orange standard. Per packet, 10c; oz., 35c.

Helen Pierce (G)—Clear blue marbled on ivory white.

Per packet, 5c; oz., 20c; ¼ lb., 50c.

HELEN PIERCE SPENCER—(See 1915 Novelties, page 8.)

HERCULES—A giant clear pink, both standard and wings, vigorous vines and fine long stems. Flowers extra large and fine. Per packet, 15c.

Hon. Mrs. E. Kenyon. (G)—Large, semi-hooded, white seeded, primrose colored Sweet Pea. Per packet, 5c; oz., 20c; ¼ lb., 50c.

ILLUMINATOR—A glorious orange salmon. In artificial light or brilliant sunshine color appears to be salmon cerise sparkling with orange. One of the brightest of Sweet Peas. Per packet, 15c.

Janet Scott (G)—Clear pink at base and shading to buff at edges.

Per packet, 5c; oz., 20c; ¼ lb., 50c.

Jeannie Gordon (G)—Standard bright rose, wings primrose, tinted with light rose. Per packet, 5c; oz., 20c; ¼ lb., 50c.

JESSIE CUTHBERTSON SPENCER — (See 1915 Novelties, page 8.)

JOHN INGMAN — A fine rich rose crimson, with veins of deeper shade. Very large flower of good substance and very bright. Similar to Geo. Herbert.

Per packet, 10c; oz., 35c.

King Edward VII (G) — One of the best pure red shades.

Per packet, 5c; 1 oz., 20c; $\frac{1}{4}$ lb., 50c.

KING EDWARD SPENCER — The best pure red Spencer, very large, with especially immense wings. Every one should grow this variety. Our strain is quite sunproof.

Per packet, 10c; oz., 50c.

KING WHITE — Novelty 1914. (See page 9.)

Lady Grisel Hamilton (G) — Soft lavender, tinted with mauve in standard.

Per packet, 5c; 1 oz., 20c; $\frac{1}{4}$ lb., 50c.

Lord Nelson, or Brilliant Blue (G) — A darker strain of navy blue. The best dark blue.

Per packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Lovely (G) — White ground deep pink shading off towards edges.

Per packet, 5c; 1 oz., 20c; $\frac{1}{4}$ lb., 50c.

Lottie Eckford (G) — White ground shaded with lilac, and having deeper border at the edges of both standard and wings. Per packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 50c.

LOYALTY — Large and vigorous dark blue stripe. Ground color, white flake and striped blue.

Per packet, 15c.

MARGARET ATLEE — Novelty 1914. (See page 10.)

MARGARET MADISON — A beautiful self-colored azure blue. This was our leading novelty last year and has proved to be a great favorite on account of its exquisite color.

Per packet, 15c; oz., 75c.

NEW MARGARET MADISON — (See 1915 Novelties, page 9.)

MARIE CORELLI — A bright glowing crimson, almost self color. Fine large flower, beautifully waved.

Per packet, 10c; oz., 35c.

MARTHA WASHINGTON — A fine large flower, white ground, margined with bright pink suffusing to center of standard and wings.

Per packet, 10c; oz., 35c.

MASTERPIECE — A splendid lavender Spencer, slightly tinted mauve. Flowers very large and wavy. Stems nearly always carry four blossoms.

Per packet, 15c; oz., 60c.

MAUD HOLMES — Rich crimson Spencer, fine large flower and quite sunproof.

Practically synonymous with King Edward Spencer. Per packet, 10c; oz., 60c.

NEW MIRIAM BEAVER — (See 1915 Novelties, page 8.)

Miss Willmott (G) — Bright orange pink, showing veins of deeper tint.

Per packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 50c.

MRS. C. W. BREADMORE — Creamy buff ground, beautifully edged with rose pink. One of the best varieties; flowers large and of best Spencer form; very vigorous.

Per packet, 10c; oz., 35c.

MRS. CUTHBERTSON — One of the most pleasing Sweet Peas. Standard clear rose pink, wings white with faint flushing of pale rose pink. Very strong and vigorous.

Per packet, 15c; oz., 75c.

MRS. HUGH DICKSON — The best cream pink Sweet Pea. The color is light salmon pink on cream ground. This variety has exceptional vigor and produces large flowers, four on each stem. Should be grown by every one.

Per packet, 10c; oz., 35c.

MRS. ROUTZAHN — A beautiful blending of straw color, tinted with blush pink and shading to apricot and rose at edges.

Per packet, 10c; oz., 35c.

MRS. SANKEY SPENCER — A large black-seeded white, good form, vigorous, flowers slightly tinged with pink when young. Per packet, 10c; oz., 35c.

MRS. TOWNSEND — White ground, edged pale blue, large size and splendid form. Fine for exhibition and garden work. Per packet, 15c.

NUBIAN — Beautiful rich deep chocolate, the best maroon. Vines vigorous, producing long stout stems carrying invariably four bold flowers.

Per packet, 15c; oz., 50c.

OTHELLO SPENCER — Of immense size, with large drooping wings, rich maroon, very dark and adapted for many attractive combinations. One of the best dark Sweet Peas. Per packet, 10c; oz., 35c.

PARADISE IVORY — A good Spencer, cream with just a suggestion of pink in the newly opened blossoms. Per packet, 10c; oz., 35c.

Phenomenal (G) — A large fluffy variety called orchid flowering; white ground shaded with blue and lavender with edge of blue.

Per packet, 10c; 1 oz., 25c; $\frac{1}{4}$ lb., 75c.

Prima Donna (G) — Clear pink, hooded form. Packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 50c.

PRIMROSE SPENCER — Morse's Extra Selected Strain. The finest of its class, clear, primrose self of best Spencer form, beautifully waved, flowers large and mostly four blossoms on each stem. Per packet, 10c; oz., 35c.

Prince of Wales (G) — Clear rose crimson, self color, large and shell-shaped.

Per packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 50c.

PRINCESS VICTORIA — White ground, standard flushed with lovely shade of pink; wings blush pink. Very similar to Florence Morse Spencer.

Per packet, 10c; oz., 35c.

Queen Alexandra (G) — The nearest approach to a true scarlet.

Per packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 50c.

QUEEN VICTORIA SPENCER — Very large flower, nicely waved, opens with blush tint, then turns clear primrose; black seeded. Per packet, 10c; oz., 35c.

ROBERT SYDENHAM — (See 1915 Novelties, page 9.)

ROYAL PURPLE — (See 1915 Novelties, page 8.)

St. George (G) — A brilliant orange pink, or more correctly, flame color.

Per packet, 10c; oz., 35c.

SENATOR SPENCER — A very large and attractive Spencer variety. Chocolate and seal brown, striped, flaked and mottled on ivory white; very distinct and novel, and one of the very largest in size. Per packet, 10c; oz., 35c.

STIRLING STENT — Glorious deep salmon suffused with orange; a beautiful Sweet Pea, especially in artificial light, but must be shaded to get true color.

Per packet, 15c; oz., 60c.

SUNPROOF CRIMSON — A grand crimson Spencer. Flowers very large and nicely waved. Generally carries four blossoms on each stem.

Per packet, 10c; oz., 50c.

TENNANT SPENCER — A giant flower of good Spencer form. The color is a curious purplish mauve. Very distinct and pretty. Per packet, 10c; oz., 35c.

THOMAS STEVENSON — Brilliant orange scarlet; standard has more orange than wings. Flowers splendid form and vines very vigorous. Should be shaded to get best color. Per packet, 15c; oz., 60c.

VEILED BRIDE — (See 1915 Novelties, page 8.)

VERMILION BRILLIANT — A brilliant Scarlet Spencer of splendid form. The standard is very bold and beautifully waved. On account of its brightness this is a very telling color and should be in every collection.

Per packet, 15c; oz., 60c.

WEDGEWOOD (Morse's Strain)—A clear, bright, silvery blue with a faint suggestion of mauve in the standard. The color improves greatly in water, and as the color ages the color brightens. Morse's strain has been pronounced the best blue Spencer, and we are glad to offer it. Per packet, 15c.

WHITE SPENCER—Morse's re-selected. The best Spencer white. Flowers very large and of magnificent Spencer waved form. Stems as a rule carry four blossoms. Per packet, 10c; oz., 50c.

W. T. HUTCHINS—Soft buff primrose and blush, shading to apricot pink at the margin. Flowers large and wavy; a splendid variety. Per packet, 10c; oz., 35c.

ZEPHYR—A splendid large silvery blue self. Flowers of best Spencer form and nicely waved. Per packet, 10c; oz., 30c.

COLLECTIONS All packets are full sized and separate.

MORSE'S EXTRAORDINARY SPENCER COLLECTION

26 leading varieties for \$2.50, including our Four 1915 Novelties.

America Spencer—bright red white stripe.

Asta Ohn—best pinkish lavender.

Bertrand Deal Improved—large rosy lilac.

Clara Curtis—best cream.

Dainty Spencer—white with rose pink edge.

Elfrida Pearson—best blush pink.

Gaiety Spencer—rose striped, delightful.

George Herbert—best rich rose carmine.

Helen Pierce Spencer—white marbled blue. (See 1915 Novelties.)

Illuminator—beautiful salmon orange.

Jessie Cuthbertson Spencer—cream striped rose. (See 1915 Novelties.)

King Edward Spencer—best bright red.

King White—best giant white.

Margaret Atlee—best cream pink.

Margaret Madison—best azure blue.

Marie Corelli—very bright rose.

New Miriam Beaver—wonderful soft pink. (See 1915 Novelties.)

Mrs. Cuthbertson—giant bi-color; standard rose, wings white flushed pale pink.

Mrs. C. W. Breadmore—cream edged rose pink.

Mrs. Hugh Dickson—very fine cream pink.

Nubian—fine deep maroon.

Senator Spencer—white with chocolate stripe.

Stirling Stent—best salmon colored.

Thomas Stevenson—best giant orange.

Veiled Bride—white flaked pink. (See 1915 Novelties.)

Wedgewood—silvery blue.

MORSE'S \$1.00 SPENCER COLLECTION

16 of the best Spencers for \$1.00

Asta Ohn—best pinkish lavender.

Clara Curtis—best deep cream.

Countess Spencer—best pure bright pink

Dainty Spencer—white with rose pink edge.

Flora Norton Spencer—best clear blue.

Florence Morse Spencer—fine light pink.

Geo. Herbert—best bright rose carmine.

King Edward Spencer—best bright red.

Margaret Madison—best azure blue.

Marie Corelli—best bright rose.

Mrs. C. W. Breadmore—cream edged, rose pink.

Mrs. Hugh Dickson—giant cream pink.

Othello Spencer—fine deep maroon.

Tennant Spencer—best purple mauve.

Thomas Stevenson—best giant orange.

White Spencer—large white.

MORSE'S "1915 EXPOSITION" COLLECTION

Eight of the finest giant new sorts in one grand collection, 75c

Elfrida Pearson—giant light pink, wonderful stems.	Mrs. Cuthbertson—best rose and white bi-color.
Illuminator—new bright salmon cerise.	Margaret Atlee—new cream pink.
King Edward Spencer—bright red, large size.	New Margaret Madison—best light lavender.
King White—new giant white.	Nubian—best giant maroon.

NOTE: We shall offer special prizes at the American National Sweet Pea Society's Exhibition in San Francisco during May for this collection. Full particulars on application later.

"GREAT FOUR" SPENCER COLLECTION, 25c

Asta Ohn—best pinkish lavender.	King Edward Spencer—giant crimson.
Countess Spencer—giant rose pink.	White Spencer—giant white.

GRANDIFLORA SWEET PEAS OUR INCOMPARABLE 25c COLLECTION

Dorothy Eckford—large white.	King Edward VII—bright red.
Hon. Mrs. E. Kenyon—primrose.	Lady Grisel Hamilton—lavender.
Janet Scott—cream pink.	Miss Wilmott—orange pink.
Prima Donna—fine pink.	

MIXTURES

To those who are going to make Sweet Peas their hobby and who intend growing the flowers for the love of them, we would strongly advise the purchasing of separate varieties. For the convenience, however, of those who wish large quantities of bloom, both for cutting and garden effect, we have carefully made up the following mixtures:

MORSE'S SUPERB SPENCER MIXTURE

This mixture is made up from our carefully prepared formula. It contains practically all the true Spencer varieties introduced to date. Great attention is given to secure a beautiful light mixture and yet include all shades nicely balanced and proportioned.

To make a better mixture of Sweet Peas than Morse's "Superb" would be impossible. Per packet, 10c; oz., 35c; $\frac{1}{4}$ lb., 85c; 1 lb., \$2.50.

BEST LARGE FLOWERING MIXTURE OF GRANDIFLORAS

This is the best possible mixture that can be made from existing Grandiflora or Eckford varieties. It has been our endeavor to secure, not only by well studied and carefully arranged formula, but by test from time to time, the best balanced mixture of color for the admirers of the Grandiflora type and those in search of a good mixture at a low price. Per packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

CUPID OR DWARF SWEET PEAS

These make a very pretty edging for a sidewalk or flower bed. The bright little flowers are borne in great profusion and make a very pleasing sight.

- Pink**—Color of Blanche Ferry, or rose standard and white wings. Per packet, 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; 1 lb., \$3.25.
- White**—Pure white. Per packet, 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; 1 lb., \$3.25.
- Mixture** of all colors, including those listed and many more besides. Per packet, 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; 1 lb., \$3.50.

VARIETIES TO PLANT

To the amateur the seedman's list of Sweet Peas is bewildering, and it is difficult to select the best varieties.

In order to simplify the picking out of colors and names, we give below our selection of the Best Varieties in each color. These selections are made after trial by us in our Sweet Pea Trial Grounds.

WHITE—The best white is undoubtedly "**King White.**" This variety was honored by an Award of Merit from the British National Sweet Pea Society. "**Etta Dyke**" and "**White Spencer**" are next in order of merit.

CREAM AND IVORY—"**Clara Curtis**" and "**Primrose Spencer**" are the best. "**Paradise Ivory**" is a fine ivory.

BLUSH PINK—"**Elfrida Pearson**" easily holds the fort in the light blush pinks. "**Florence Morse Spencer**" and "**Princess Victoria**" are other excellent varieties. For a deep pink we find our stock of "**Countess Spencer**" unequaled.

CREAM PINK—"**Margaret Atlee**" has no immediate rival. "**Mrs. Hugh Dickson**," "**Mrs. Routzahn**" and "**Constance Oliver**" have been leaders. "**New Miriam Beaver**" is a lighter type and is going to be the leader.

ORANGE—"**Thomas Stevenson**" is first choice. "**Helen Lewis**" is a little less dazzling, but very fine.

SALMON—"**Illuminator**" is without doubt glorious, but is really an orange-salmon. "**Stirling Stent**" is the nearest rival for rich salmon color.

SCARLET—"**Vermilion Brilliant**" at present is our best.

CRIMSON—"**King Edward Spencer**" or "**Sunproof Crimson**" are excellent, followed closely by "**Maud Holmes.**"

CARMINE AND ROSE—"**Geo. Herbert**," "**John Ingman**," "**Marie Corelli**"—in order of merit.

MAROON—"**Nubian**" is our selection of the best Maroon. "**Othello Spencer**" is vigorous and good.

LAVENDER—Tastes and ideas in Lavenders differ. Our selection is "**New Margaret Madison**" for pale lavender. "**Asta Ohn**" and "**Masterpiece**" for deeper lavender.

BLUE—Morse's Strain of Wedgewood easily holds first place, followed by "**Flora Norton Spencer**" and "**Zephyr.**"

MAUVE—"**Tennant Spencer**" is our favorite. "**Bertrand Deal Improved**," a rosy lilac, is very fine.

PURPLE—"**Royal Purple**" is easily best.

PICOTEE EDGED—"**Elsie Herbert**," white ground, and "**Mrs. C. W. Breadmore**," cream ground, pink edged. "**Mrs. Townsend**," blue edged.

BICOLORS—"**Mrs. Cuthbertson**" is the gem of this class. "**Apple Blossom Spencer**" is free and good.

FANCIES—"**Afterglow**" and "**Chas. Foster**" are good.

STRIPED AND FLAKED—"**Gaiety Spencer**" is the best red stripe. "**Jessie Cuthbertson Spencer**" is best cream ground stripe. "**Veiled Bride**" is the daintiest pale pink flake. "**Loyalty**" is the best blue stripe and "**Helen Pierce Spencer**" the best blue flake.

We would call particular attention to the splendid collections we make up and which are wonderful value for those who wish a grand display.

JESSIE CUTHBERTSON SPENCER
(Described on page 8.)

C.C. MORSE & Co.

△ SEED GROWERS △

MARGARET
ATLEE

SAN FRANCISCO,
CALIFORNIA, U.S.A.