number is continually increasing—to adopt rules as uniform as that affecting capitalization; that is to say, generic words having a given form of ending should demand a gender ending in the specific word conforming to the general Latin rule, ignoring the accidental exceptions of language. So generic words ending, for instance, in *us, os, ax,* etc., require in every case the masculine form of the specific name, those ending in *a, is, e,* etc., the feminine and those ending in *m* or *n* the neuter. Personally, I should even be in favor of writing *Venus mercenarius,* instead of *Venus mercenaria,* first of all to agree with the uniformity rule mentioned, but also, in this special case, because the goddess of love can not be a clam, and the word *Venus* in *Venus mercenarius* can not therefore stand for the goddess of love, but is merely a word resembling her designation, though masculine for nomenclatorial purposes.

Furthermore, in alluding to Greek genders it should be remembered that when a word derived from the Greek, Arabic or Hottentot, or arbitrarily composed of a pronounceable series of letters, becomes the name of a genus modified by an adjectival Latin specific name, the genus word can no longer be Greek, Arabic or Hottentot, but automatically becomes Latin and should demand gender endings in the specific word in accordance with the most general Latin rules alone. It is only by adopting rules rigidly fixed such as this that nomenclature can be rendered practically stable, and this is an end that all zoologists would rather see than strictly philologic purity, which, conforming to all sorts of linguistic vagaries, would give to it a piebald character certainly very undesirable and inconsistent with uniformity, which is the most essential requisite of any nomenclatorial code.

Finally, it might be added, biology has nothing closely in common with philology. We simply have to use words of some kind to express ideas and name the different forms of animal life, but this language should be invented by biologists for their own ends and not made to conform to the pitiful mixture of contradictions and exceptions constituting actual human language, either ancient or modern.

THOS. L. CASEY

WASHINGTON, D. C.,
May 11, 1918

OUR NATIONAL FLOWER

TO THE EDITOR OF SCIENCE: In confirmation of the admirable plea for the columbine by Albert A. Hansen (SCIENCE, April 12, 1918) may I call attention to a few additional facts regarding its unique fitness to be our national emblem, and the support it has already received? A history of earlier efforts in The National Flower Movement is given by the present writer in the *Transactions of the Massachusetts Horticultural Society,* Part I., 1898; where will also be found a full discussion of the merits of various candidates.

The idea of having our native columbine for national flower occurred independently to several persons during the time of preparation for the Columbian Exposition at Chicago; and in 1895 there was organized the Columbine Association whose object is, by spreading information of its fitness, "to bring about the official adoption of the columbine as the national flower of the United States." The following year a National Flower Convention composed of delegates from the various states of the Union, chosen by their respective governors at the request of Governor Elias Carr of North Carolina, met from the twenty-first to the twenty-third of October at Asheville to decide upon the most suitable flower for our national emblem. With a view to helping future decision it was unanimously

Resolved, That a plant to serve properly the purposes of a national flower should meet the following conditions:

1. It should be a native of the United States, and should grow wild over the greater part of its area.

2. It should bloom on one or more of our national holidays.

3. It should be capable of easy cultivation in any garden.

4. It should not be a weed, or in any way offensive, or harmful to health.

5. It should bear what in the popular sense is called a flower, and should not be merely a foliage plant or one chiefly valued for its fruit.

6. It should lend itself readily to floral decoration by variety and purity of color and distinctiveness of form.

7. The features characteristic of its form should combine such simplicity and gracefulness that, when used conventionally in decorative design, the flower may be readily recognized independently of its color.

8. It should be a flower which has never been used by any other people as their emblem, and not resemble such a flower in general form.

9. It should possess, if possible, patriotic associations plainly connecting it with the best for which our country stands among the nations of the world.

While the convention deemed it inexpedient to make any recommendation of a special flower at that time it was evidently the sense of a majority of the delegates present, as shown by an informal vote, that the columbine, or aquilegia (sometimes known as wild honeysuckle) is the only flower which meets the requirements set forth in the above resolution.

Beside the columbine's qualifications advanced by Mr. Hansen, the following are noteworthy. Short-spurred forms of the flower, native to our Rocky Mountains and to the home of Columbus, resemble so closely a group of doves that the flower's name—like that of the great discoverer, and our national title Columbia—is derived from the Latin *columba,* a dove. Thus, the same flower which rides our mountain storms like an American eagle becomes in quiet valleys a dove-flower symbolizing peace. One of its short-spurred nectaries bears remarkable resemblance to a liberty-cap; those of moderate length are miniature horns of plenty; and the longest are golden trumpets proclaiming Columbia's ideal of liberty, whence comes the peace that makes for plenty, the plenty that makes for power, and the power that makes for peace. A columbine leaf with its many leaflets in organic union, the leader among them having thirteen lobes, aptly recalls that mutual loyalty which the founders of our thirteen original states implied in their motto *e pluribus unum.*

Frederick LeRoy Sargent
Cambridge, Mass.

The article on the above subject in the April 12 number of Science is timely, inasmuch as, if we do not hurry, all the best flowers will be selected ahead of the nation. Even the one Mr. Albert A. Hansen proposes has already been preempted by Colorado.

The *Aquilegia canadensis* is a charming spring flower, well worthy the compliment he pays it, but I will mention a few objections. In the first place, it would be a trespass upon that state's rights to select their flower, especially when there are so many others to choose from. Then its name, *canadensis,* indicates that is was first made known from Canada, which is no part of America, as we wish it to be known, the U. S. A. The chief objection to the wild columbine is that it falls to pieces so readily. This prevents it from being a valuable addition to a bouquet, or for decoration. After the petals have fallen, only the ragged follicles remain. Nor is it extremely common in this part of the country, the specimens I have growing in my garden coming from a start procured with some difficulty.

Some years ago, the goldenrod was proposed for the national flower of America and I have often wished that it might be adopted. There are 47 distinct species of this plant mentioned in Britton and Brown's "Flora," almost as many as the states in the Union. Perhaps one or two more may be discovered to make the number exact. All are of the same color, yellow, like sunshine, symbolic of cheerfulness. The goldenrod belongs to the Composites, the "many in one" family of flowers; and its botanical name, *Solidago,* means to make whole. It is a universal plant in this country, and one species, *Solidago juncea,* blooms from June into November. This is a handsome variety and bears cultivation, as do most of them.

Columbia's flower, the goldenrod, on hill and valley grows;
The gold is for the one who earns, the rod is for her foes.

Katharine Dooris Sharp
London, Ohio

SCIENTIFIC BOOKS

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