Printed at his Mr. John (leaf torn)
charge on bad paper (leaf torn)
not so correct as they ought (leaf torn)
in 100 sheets.

The second paragraph relates to meridional distances, transits, etc., observed between 1689 and 1704. A brace encloses its four lines, and Flamsteed's comment is:

A fair copy of these on 175
sheets was put into Sr. Is. New (paper torn)
hands Mar. 20 1707/8 to be printed.

N. B. The figures that give the year are here somewhat doubtful, but see below.

The third paragraph is divided into numbered sentences. The first seven relate to Ptolemy's and other catalogues of stars; they are included within a MS. brace; Flamsteed's comment is:

These be ready to be transcribed.

Sentence 8 of paragraph 3 (5 lines) relates to the British Catalogue of 3,000 stars; a MS. brace encloses it; Flamsteed's comment is:

These are printed at my own charge.

N. B. The wording here makes it evident that the MS. notes in this handwriting are by Flamsteed himself.

The next four lines of the text have no MS. comment, but the succeeding three are printed as follows:

"The New Figures of the Constellations, or the Ancient Ones restor'd (those in *Bayer,* and on our Globes being false, and different from all the Catalogues in all Languages) in about Sixty Copper Plates, each near Two Foot broad, and Twenty Inches deep, with a Preface."

This sentence is enclosed in a MS. brace and Flamsteed's comment is:

These were altogether necessary and
ought to have been first taken
care of but were designedly
neglected by Sr. Is. N. to spoyle
ye whole.

The next printed words relate to part first of the proposed book. A MS. mark refers to the foot of the page where Flamsteed's MS. comments are written, as follows:

The first part was printed off in October 1707. March 20 1707/8 Sr. Is. Newton had 175 sheets put into his hands to be printed, of which what is become J. F. knows not, save that E. Halley has printed some sorry Abstracts of a part of them without J. F's knowledge and consent.

At the foot of the page are two MS. queries by Flamsteed, as follows:

1. *Qs. What is become of £1200 allowed for ye work per Prince George.*
2. *What is become of all Copies already Printed.*

At the foot of the page there is a line of MS. written by another hand in a different ink, as follows:

Memdm. J. F. told W. L. at ye Treasury Office that E. H. had stolen 2 or 3 of his best fixed stars.

Those who wish to follow the rather complicated quarrel of Flamsteed with Newton and Halley can find a sufficient and fair account of the controversy in the 'Dictionary of National Biography,' Vol. XIX. (Article Flamsteed—see also Newton and Halley). It is of extreme interest to have found Flamsteed's own comments on the controversy. The MS. referred to has, by direction of the Superintendent U. S. M. A., been deposited with the Royal Society of London, which possesses many of the manuscripts of Flamsteed, Halley and Newton.

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A BETWEEN SEASON BIRD FOOD SUPPLY.

AN apparently unnoticed food supply for birds is found in the heaps of drift, the flotsam and jetsam cast up along the shores of rivers, creeks and other bodies of water. These places are much resorted to by crows, jays and blackbirds, and probably most of the sparrows feed about them from time to time. As they exist during the winter and early spring when food is not easily accessible over the whole country, they are probably welcome stores to our winter birds.

In order to ascertain the character and quantity of available bird food in these drift heaps I filled a half pint tin can with the material, scraping it in at random from the surface of one of them. Besides the bits of

bark, twigs, leaves, etc., I found in this quantity of the drift, by actual count, 1,583 seeds and fruits of more than 55 species of plants. These are without exception substances which have been found in the stomachs of birds. What a rich variety of food there is in the drift heaps, and what a truly enormous quantity there must be in the cast-up material which lines the shores of all of our waters. Besides the vegetable matter there were also several insect pupæ and a few living chrysomelids and weevils.

The following seeds and fruits were contained in a half pint of drift collected along Northwest Branch, Montgomery County, Md., March 19, 1905: Tulip-tree (262), pigweed (199), purslane (145), cowbane (124), elderberry (108), witch grass, etc. (98), oats (75), black mustard (74), common ragweed (51), sedges of genus *Carex* (44), buttonweed (39), pale persicaria (38), *Polygonum* spp. (35), lamb's quarters (31), spotted spurge (31), blackberry (28), great ragweed (21), green foxtail (18), yellow sorrel (18), beaked rush (17), yard grass (17), white ash, (12), mountain laurel (10), rice cut-grass (9), pokeweed (8), sedges beside *Carex* (8), black bindweed (7), Pennsylvania persicaria (6), aster (5), alternate-leaved dogwood (4), basswood (4), tubers of sedge (4), wild turnip (3), cockspur grass (3), broad-leaved dock (3), kinnikinnik (3), water oak (3), summer grape (3), green ash (2), touch-me-not (2), broad-leaved arrowhead (2), poison ivy (2), *Paspalum* sp. (2), water plantain (2), cocklebur (2), nightshade (2), corn cockle (1), bloodroot (1), scarlet sumac (1), spiderwort (1), beggar's ticks (1), mulberry (1), pine (1), spatterdock (1), sourgum (1).

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AN UNDESCRIBED ALTERNARIA AFFECTING THE APPLE.

An apparently undescribed species of *Alternaria* was found on a single specimen of apple a year ago while the writer was investigating apple rots at the Michigan Agricultural Experiment Station. On coming to this place the same fungus was found to be one of the most common causes of rot in apples in the state of Colorado. Professor W. Paddock, of the Colorado Experiment Station, had already done some work with this fungus.

The disease manifests itself by attacking the blossom end of the fruit, causing a decayed area of a very dark brown color. This area may remain quite small or it may gradually enlarge until the whole fruit is involved, after which the decayed specimens dry down to a shrivelled, hard mass. The fungus appears to affect different varieties to an unequal degree, some apple growers having reported that it is almost impossible to secure ripe fruit of certain kinds because of the attacks of this disease. In other cases it has been found associated with a blackened condition of the seed cavity in ripe fruit, the carpels being much discolored on the inner side. This condition may also be accompanied by a kind of core rot due to the invasion of the flesh around the carpels by the fungus.

Inoculation experiments are being carried on with a view to determine other possible hosts, as well as the characteristic effects of the fungus on the apple.

The fungus is apparently carried through the winter on portions of the flowers and fruit that were attacked by the fungus during the preceding season and which are still attached to the trees. Reports indicate that the fungus can be readily held in check by spraying with Bordeaux mixture.

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January 18, 1905.

ON THE USE IN SURGERY OF TENDONS OF THE ARDEIDÆ AND GRUIDÆ.

The subject of sutures and ligatures and their proper sterilization and use has long been an important subject in the realm of modern surgery. Various materials have from time to time been recommended, many to drop by the wayside, and we find even in the materials of the present day, namely, catgut, kangaroo tendon, silk, silkworm gut, horse hair and silver wire, great difference of opinion in the minds of surgeons as to their use.