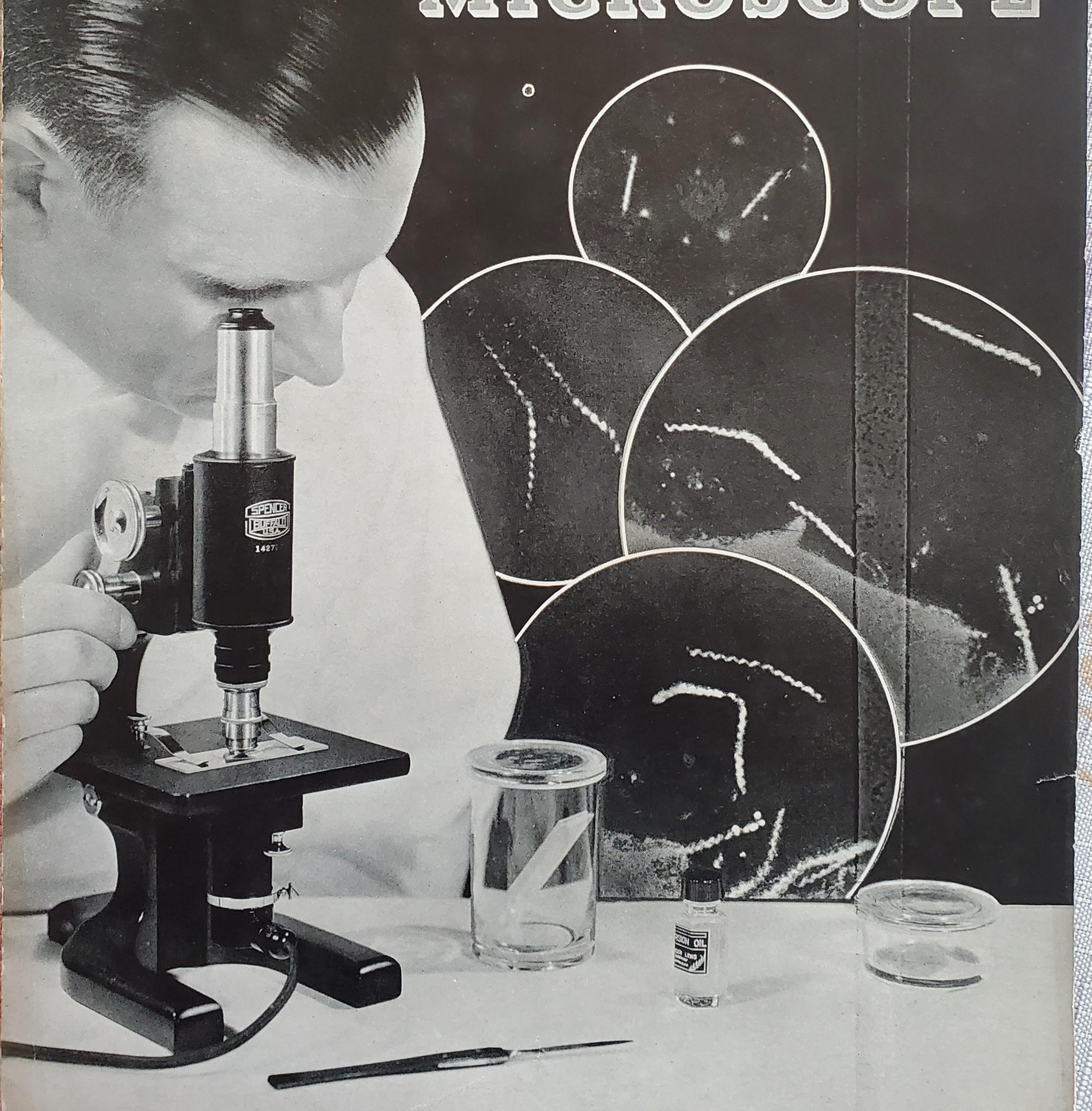
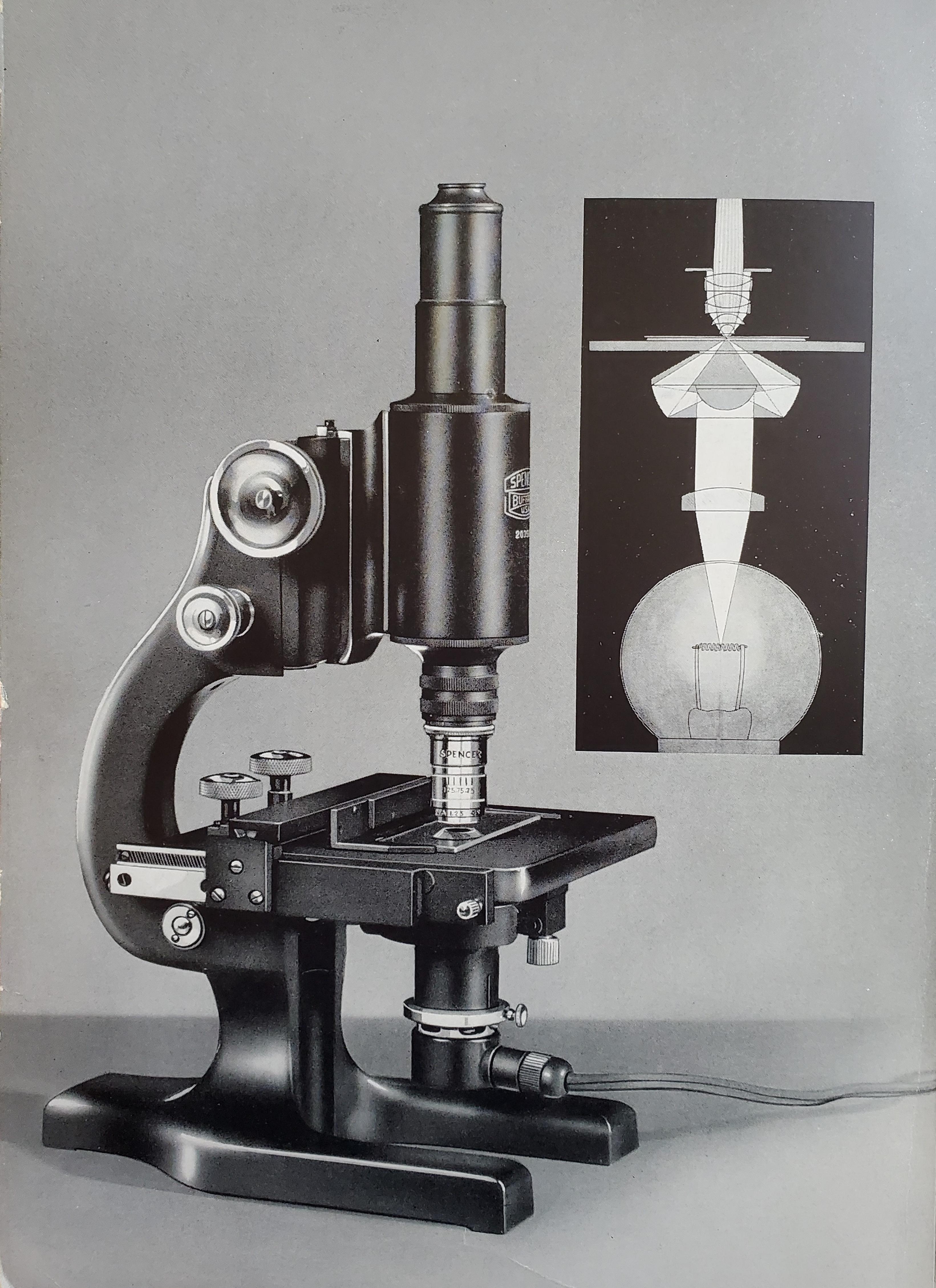
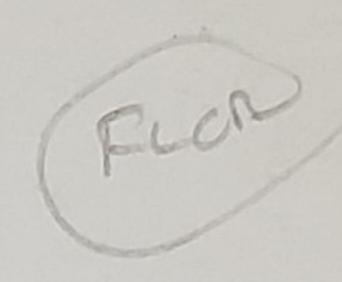
# Spencer DARK FIELD MICROSCOPE







# The Dark Field Microscope

The program of the American Public Health Service for the eradication of syphilis is becoming generally effective. The medical profession, leading the popular interest, has established uniform methods of diagnosis. One of the most widely accepted and positive methods employs the dark field microscope technique in searching for the living Treponema pallidum.

Dark field illumination may be compared to the effect produced when a beam of sunlight illuminates particles of dust floating in the air. Some micro-organisms are so similar in refractive index and color to the medium in which they live that they cannot be seen in the ordinary bright field, but when the illumination strikes them from the sides, and the background is dark, they become self-luminous and are identified easily. The spirochaete of syphilis is very difficult to see, except by means of a good dark field illumination.

Heretofore, considerable technical skill has been required to center a dark field condenser and obtain a good effect. Many makeshift devices that were inexpensive but not properly designed to produce a good dark field have been sold. The Spencer Dark Field Microscope is especially designed to produce excellent dark field illumination without requiring technical skill because the illuminant, the dark field condenser, and the objective are permanently aligned and the only manipulation necessary is focusing the objective.

The substage is hinged at the back end, as illustrated, and is held securely at the front by means of a screw with a knurled head. Thus the substage is held in positive alignment with the objective as it is centered at the factory. The hinged construction facilitates cleaning the condenser after it has been used in oil immersion contact with the slide.

The Spencer dark field illuminator (bi-spheric type) has been found to give the most

practical results. The illuminant is built into the same tube that holds the dark field condenser and is positively centered. The bulb is 6 volt, 1.7 ampere, with built-in condenser.

The achromatic objective is the standard 1.8mm., 1.25 N.A., and contains an iris diaphragm. It is attached directly to the body tube by means of an adapter.

Other constructional features of this instrument include: a sturdy stand (the same as used for Spencer medical microscopes); rigid arm which maintains permanent optical alignment; large base for stability at any inclination, Bakelite stage; rack and pinion coarse adjustment; micrometer screw type fine adjustment; large (45mm.) body tube. All bright parts are rhodium plated.

### Dark Field Slides

The slides, especially selected for dark field work, are white glass, free from bubbles and striae and of uniform size and thickness. They have plane surfaces and edges. The thickness varies between 1.15 and 1.25mm.

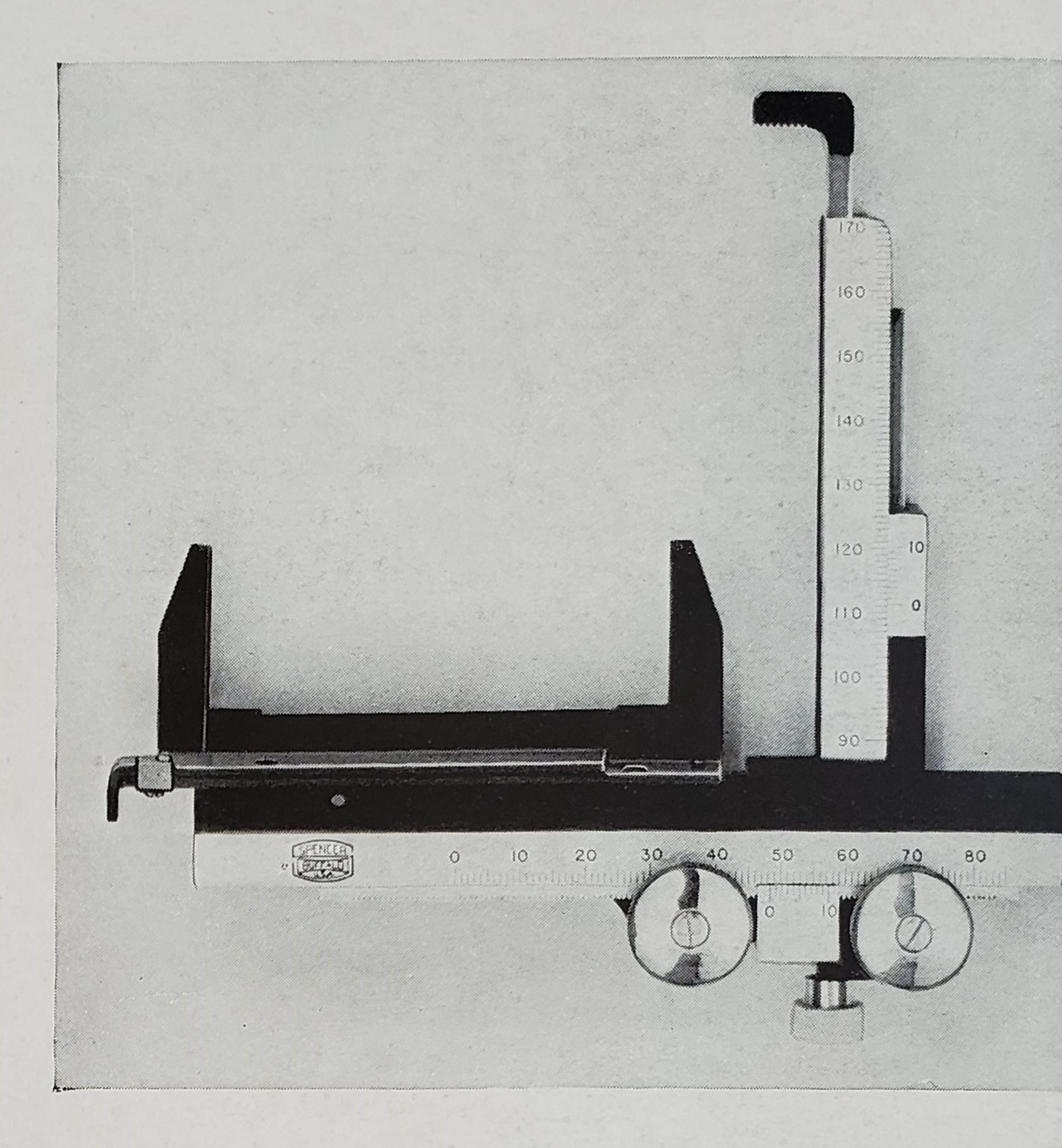


## Mechanical Stage

A mechanical stage is a real aid in systematically exploring a slide, so that no part of the specimen may be overlooked.

The sturdily built Spencer mechanical stages may be attached or removed quickly. The rack and pinion movements in each direction are smooth and positive. Any portion of a specimen can be placed in precisely the position desired and even the extreme edges of the slide can be brought into focus without the objective hitting any of the parts. Spencer mechanical stages are finished in durable black and rhodium plating and are supplied in leatherette cases.

These stages have a to and fro movement of 50mm. and a lateral movement of 75mm., accommodating both 2x3" and 1x3" slides. The No. 484 mechanical stage is not graduated and the No. 485 has graduations and verniers reading to .1mm.



Catalo No.	Description	Price	
	Spencer Dark Field Microscope, complete with 1.8mm. oil immersion objective with built-in iris diaphragm, 10X Huyghenian eyepiece, dark field condenser and transformer 110-120 volt, 60 cycle current		
	60 cycle current		# -00.00
32-M	Spencer Dark Field Microscope as above, but with built-on mechanical stage	150.00	
484	Mechanical Stage complete in case	05.50	212.00
485	Mechanical Stage with graduations and verniers, in case.	26.00	32.00 41.50

# Spencer Lens Company





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