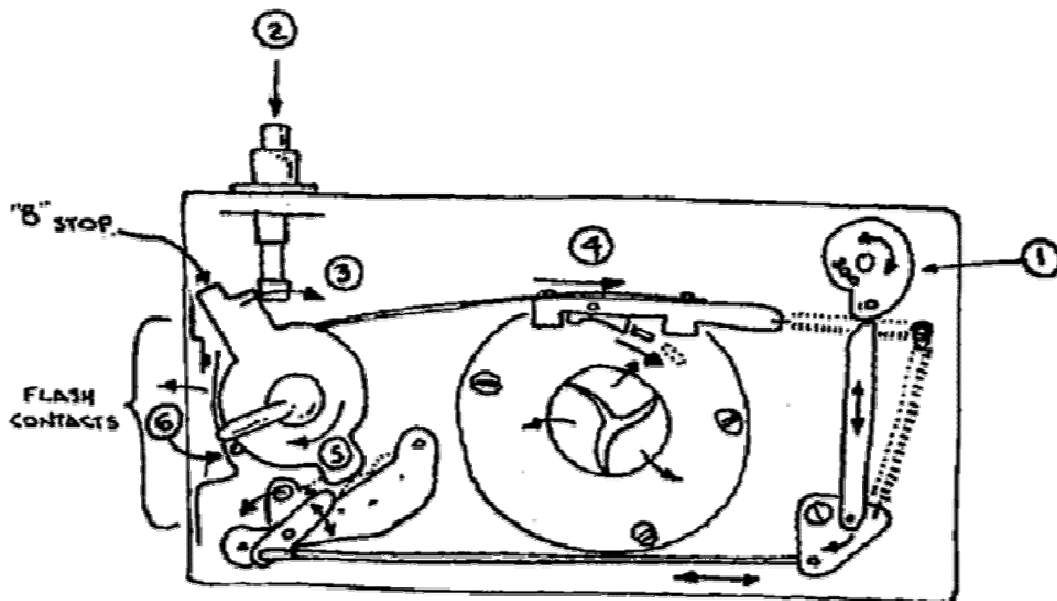


### HOW IT WORKS: Argus C3

Okay, no jokes about "IF it works". The Argus C3 is actually quite a reliable camera and i think rather nice looking in its unique way, though certainly not an ergonomic masterpiece. The Argus leaf shutter mechanism is scattered all over, utilizing almost the entire volume of the front of the brick-shaped body:



This front view of a skinned C3 shows essentially every moving part in the camera. To begin, we set the shutter speed by rotating the shutter speed dial at (1), which has a scroll-shaped cam on the back which, in turn, presses down on a vertical post: the farther down we push, the slower the shutter speed (you'll see why in a second). The post rotates a linkage at its bottom end, to which there is a long horizontal rod attached. As the post pushes down, the rod moves to the left (as we're viewing it), rotating a lever at its opposite end clockwise. At a higher speed setting, this lever would move counterclockwise, pushing the little pin in the delay timing gear ahead of it. We'll get back to that; now let's fire the shutter.

The shutter is shown in its cocked position: the cocking lever at left center has been pressed down, rotating the disk (5) until its upper extension is trapped to the left of the shutter release plunger. We now

press down on the shutter release button (2), the thicker end of the plunger at (3) moves below the mating ledge at the top of the disk and the disk begins to rotate clockwise (it's being pulled by the horizontal spring at the upper right). As it travels, so does the shutter tripper at (4), which has a little tooth hanging below it. The tooth catches on the tab on the back of the blade actuating ring, moving the tab from the closed position (solid lines) to the open position (dashed lines). But just about now, the lower projection on the disk (5) runs into the pin on the delay timing gear, and it can't proceed until the delay gears wake up, rattle, buzz and reluctantly give way. How long this takes depends on how far (5) has to push the pin, which in turn depends on how far it was already pushed by the shutter-speed-setting lever: the farther the lever has pushed it, the less work there is left for (5) to do, and the faster the speed (see, I TOLD you we'd get back to it). At the fastest speed, the lever has pushed the pin entirely out of the way so the projection at (5) can just fly on past.

Okay, now back up to (4). Once the little delay pin is out of the way, (4) continues to the right and the tab on the back of the blade actuating ring, which is moving downward as well as to the right, backs out of the way and (4) goes on past. Once (4) is gone, a little hair spring on the back of the shutter blade assembly immediately returns the blades to the closed position.

Since the C3 is synchronized for flash, we also have that to consider: there is a little bump on the left side of the disk, and one flash contact is a long bronze spring just next to that. As the disk rotates, the bump strikes the contact and pushes it into the other contact, causing the flash to fire (the flash unit attaches at the opposite end of the camera from the contacts; conveniently, the metal front panel of the camera is used as an electrical conductor to complete this circuit.) The location of this bump on the side of the disk is widely variable, allowing, I would think, for adjustment to just about any sort of flash timing you like.

[NOTE: To adjust the flash contacts for "X" synch for electronic flash, loosen the 2 screws on the front face of the shutter cocking disk (5), and rotate the copper thingie until the flash contacts (6) come into contact as the shutter blades approach their "full open" position. Now

tighten the screws back down and test fire it with a flash to check. An ohmmeter helps, but you can do it by eye pretty easily.]

The "B" setting is selected by rotating the shutter release button itself: this brings forward another thick section of the shutter release plunger, a bit higher up, which snags the taller bump on the upper extension of the disk, blocking its further rotation until the button is allowed to go back up.

There is one other rather clever detail, though a minor one: for recocking, the tooth on the bottom of (4) has to be retractable so it won't jam on the tab as it passes by, and it has to reliably snap back down into position. Well, it turns out that the material which connects the tripper at (4) to the disk at (5) is not a cable or a link as you might imagine, but a strip of thin, flexible spring steel. This is riveted to the tripper in two places, with the space between the rivets forming a very effective little leaf spring to actuate the tooth.

That's all there is to it. Very simple, lots of room, little to go wrong and easy to get at if it does. There's no reason they couldn't have turned this into a full range, 1 second to 1/300 shutter quite easily; I imagine there was just no need for such a thing to satisfy their market.