## CHAPTER 4 - A SHARP KNIFE AND BLOATED HEIFERS

All of the men who surrounded me in my childhood carried sharp pocket knives. I was given my first knife on my sixth birthday. Since that time I have always carried a pocket knife. We kept our knives sharp by rubbing the blades on an Ouchita whetstone. The beauty of that stone, which is mined in Eastern Oklahoma and Western Arkansas, is that it is naturally permeated with a small amount of oil so you don't have to spit on it to make it work.

I once had the privilege of watching my father use his pocket knife to save 4 prize heifers.

On our dairy we had a special pen where young female bovines, which are called heifers, were kept. The pen separated the heifers from the bulls to prevent their getting pregnant until they were old enough. For my father that time came in the last half of their second year.

One Sunday morning in the spring of 1933 we went through our weekly ritual of preparing to go to church. My most onerous task was cleaning and polishing my shoes, which I never wore if I could keep from it. My father used wax on his and brushed them until the glistened. On that particular morning we dressed in our Sunday best and were ready to go to church. My mother, father, two sisters and I got in our Oakland sedan. Dad drove and had just come to the road that passed near our barn on its way to the section line. As he turned, he glanced toward the cow pens. Letting out a yell, he slammed on the brakes and jumped out of the car. He paused long enough to explain to the rest of us, "Five heifers have broken out of their pen and are in the young Kaffir corn."

He didn't have to repeat himself for us all to know that this situation

needed immediate attention. To understand what my father faced, you need to know about a cow's stomach and a disease called BLOAT.

A cow's stomach is made up of five exquisitely complex chambers. Those 5 chambers cause some people to say a cow has 5 stomachs. Designed to perform special tasks, each chamber is the equivalent of an organic chemistry laboratory.

Bloat, the disease which I mentioned, is the abnormal accumulation of gas in the two front chambers of the stomach. Three types of BLOAT exist. The first is Frothy bloat caused by diets that form a frothy foam in the stomach that interferes with the normal passage of gas through the gastro-intestinal tract. The second is Free Gas Bloat caused by diets that lead to excessive gas production. The third form is caused by forces outside the stomach that block the passage of gas to its natural outlets.

On that Sunday morning my father faced the second kind. That is, his heifers were eating the fresh young shoots of a grain sorghum called Kaffir corn. The tender outer coating of the young plants would break down much more quickly than that of older, tougher plants and would thereby form intolerable amounts of gas in the heifer's stomach. When bloating occurs and the gases cannot escape as quickly as they are formed, they continue to build up and cause severe distention of the abdomen, compression of the heart and lungs and eventually death.

My father had talked this problem over with other cattlemen and knew what they advised.

Pulling out his pocket knife he ran into the field of Kaffir corn where several of his prize heifers were already down. His problem at that moment was dictated by a cow's anatomy. The chamber of the stomach which is at fault in the bloat caused by excess production of gas is located on the left side of the abdomen and can be safely approached at a point behind the last rib. Dad had to find the middle of that last rib and at that point, stab his knife into the bloated belly. I followed him into the field and heard the gas spewing out after he made the stab wound into the first heifer. Getting to the

correct spot on the heifer's anatomy was not always easy. Some of them had fallen on their left side and the crucial spot behind the rib was under them. In those cases the whole family had to pitch in and help roll the animal off her left side so my father could do the job.

After an hour of hard, sweaty work the five heifers were back on their feet. We drove them back into the safety of their own pen and repaired the hole they had torn in the fence. Until that was done we had not found time to look at each other or make small talk. My mother was the first to speak. "Well Frank," she said to my father, "the Bible says we shouldn't work on Sunday. But, it also says if you have an ox in a ditch you are forgiven for getting it out. I believe five heifers are better than one ox, so I am sure we are forgiven."

Dad brushed the dirt off his Sunday suit and, looking us over, said, "We're all a mess. "Let's go to the house and clean up. We'll go to church tonight."

Unfortunately, one of those heifers died. But we were proud of our father for having saved four. When I was preparing this manuscript, I wondered why that one heifer had died. I Googled "Bloat in Cattle" on the internet. A very sharp veterinarian had written a good article about Bloat. In it, he was quite firm when he advised cattlemen not to puncture a cow's abdomen to relieve bloat. This, he pointed out, allows the bacteria-laden contents of the stomach to spill into the peritoneal cavity causing peritonitis—a frequently fatal disease. My father was very fortunate to have lost only one patient to his crude surgery. Today he could call a veterinarian who would come out and introduce a stomach tube through the cow's mouth to release the gas. If that weren't sufficient, the vet would have three modern drugs he could choose from to administer through the tube and save the animal's life. Seventy-six years ago my father had no choice.