AFTER GROUSE IN WISCONSIN.

FOR SOME YEARS grouse and other game were protected in this State laws rigidly enforced, and they (the birds, not the laws) have multiplied accordingly. The inhibition was removed, according to the understanding of those interested, on Jan. 1 of last year, consequently there has been a great amount of shooting. There is only one warden to each Wisconsin county, and he cannot possibly look over a wooded territory from thirty to forty miles square and guard all of its streams from fish poachers. Moreover, he has a taste for shooting, and relishes a roast grouse himself. So it has come to pass that in most parts of Wisconsin the grouse season is open in winter.

It may be said of grouse that while its vigilance is acute, its sagacity is not remarkable. It is afflicted with the belief, common to other members of the gallinaceous family, that so long as it remains quiet it cannot be seen. Few men, I was told by sportsmen, have ever seen a grouse "drum," which is their method of wooing and challenging in the springtime. By the exercise of an Indian-like stealth in stalking it may sometimes be accomplished. Also, when the birds are feeding upon the buds of ironwood trees, which form almost their only sustenance in the winter, it is difficult to approach them softly. Their hearing is acute, and the crunching of the hunter's feet upon the snow will send them scurrying from the treetops before he gets near. If he understands the birds well enough to approach boldly, making even a little more noise than is necessary, stopping to break a branch, or to whistle or sing, he will possibly find the flock crouched closely upon the branches, with heads drawn in, waiting for him to pass. Similarly, quails are usually wildest when they have not been shot over. A bevy that has not been disturbed will rise in thick covert when thirty yards away. Once they have heard the crack of the gun, however, they will lie still when the sounds of footsteps approach.

In what is called "drumming" the grouse avoids a newly fallen log, preferring one that is partially decayed. A half-rotten stump of oak serves as a favourite place. The bird does not crouch, but stands erect, and its wings beat with such rapidity of motion that it is impossible to count the number of strokes. Oddly enough, the ends of the wing feathers touch the log lightly, the drumming being produced by the force with which they strike the body and the air under them. Once a suitable piece of timber is selected it will be used year after year by scores of birds, though never by more than one at a time. There are logs in these forests which have furrows in them 2in. deep, worn therein by the beating pinions and claws of generations of excited grouse. If another male be within hearing it is apt to appear upon the scene, whereupon a combat follows, and the bird once suggests the contest of gamecocks. The natives told me the birds were not seriously injured, as their spurs are only rudimentary. Their weapons of attack are beak and wings. When a combatant has been knocked down by a stroke from the successful rival, the latter struts proudly around, drumming his neck ruff, and hooting upon the ground with his wings. When the fallen one has sufficiently recovered it steals away crestfallen rapidly on foot, but with a vanquished air.

The wood grouse of which I write seems at times to revel in the snow. Cold weather scarcely affects its heartiness or activity. When the fall of snow is heavy it will often squat motionless and allow itself to be buried for some inches. It is not infrequently the case, however, that the birds lose their lives from this disregard of severe cold. The winter weather of the North West is uncertain. It sometimes happens that after snow has fallen for the greater part of a night there will be a rise of temperature and a slow rain. Then may follow quickly a bitter north wind and a hard frost. Then this happy-go-lucky grouse may be covered by a roof of snow a foot deep. Their lives depend entirely upon their ability to dig their way through the fleecy covering with their bills, which are sharp and heavy, but not infrequently they fail.

The sport-man who starts out to shoot grouse in the depth of winter has all his work cut out unless he is a tough and enduring man. The birds in snowy weather are compelled to travel long distances to pick up a living, and they are quick on their feet. They get over the crusted snow with less effort than a man, and are likely at any time to vary the monotony of foot progress by rising on the wing and flying some distance before settling. It is possible to trail them and stalk them, but it requires patience. The favourite feeding place of the birds is in twilight. Between sunset and darkness in this latitude there is nearly an hour of grey light, and it is possible to see an object the size of a grouse. In this hour they feed upon the buds of the ironwood tree, which seldom attains a height of more than 40ft. It has many small branches, and at the end of each twig is a tiny bulb containing a pinch of bitter buds. Of these buds the birds are fond, and when feeding the noise of their snipping can be heard for some distance. The tree grows almost wholly in the small ravines between the hills.

Up the gorge the hunter slowly proceeds, listening for the clipping of the sharp beaks. If he hears the sound, made by the severance of the bud from the stem he will see probably half a dozen birds feeding in company. When the first faint snips reach his ear he pauses and endeavours to fix how far the birds are from him and on which side of the gorge. These gorges, by the way, remind me in their conformation of the chines of Bournemouth and the Isle of Wight. Having settled the locale of the quarry he advances, and sees them perched in an ironwood tree. They have stopped feeding, and are looking uneasily about. The object of his seemingly incautious method of approaching is to cause them to stir the branches, thus assisting him in placing them. Having discovered them, he hides behind a tree, and waits until they resume feeding, which they soon do. He then brings his rifle into play, and begins upon the bird on the lowest branches, as its fall is not apt to disturb those above it. If he has been fortunate enough to pick off the bottom bird the others will be startled by the sound of the weapon, but they will not take flight. On the contrary, they gaze about and seem to be confused. Now is the hunter's happy moment, and he shoots as rapidly as possible. He may obtain several shots, but frequently at the third discharge the covey goes off, speeding away over the hills with astonishing rapidity. The sportsman picks up his brace or more and wisely determines that as he will get no more shooting in that particular ravine he may as well make for home.

In connection with western grouse I may relate an anecdote of the late Charles Reade. On one of my trips to the United States I sent the distinguished novelist by the purser of a steamer of the American line, in cold storage, a brace of grouse, with instructions as to the best method of cooking them. At the same time I inclosed a bottle of bay rum, an excellent accessory of the toilette that I thought, as a matter of course, he knew all about. It seems he did not, for some weeks after I received a letter in New York in which he told me he had enjoyed the game, but he thought the addition of the bay rum must be an acquired taste. He evidently got into bad luck, not knowing the toilette article, that I had intended the bay rum to be quaffed with the grouse.

HOWARD PAUL.

DUCK SHOOTING ON A QUEENSLAND LAGOON.

I SUPPOSE THAT EVERY SPORTSMAN cherishes in his memory the recollections of one particular day's sport, a red-letter day in his career. A day on which not only was there an abundance of game, but when his efforts to obtain it proved both successful and thoroughly satisfactory to himself. The angler, of the day when he threw his fly unerringly and landed fish after fish; the hunting man, of the day when his horse straightened, led the field through forty minutes of the best, and finished alone at the death; the gunner, of the day when his gun seemed part of himself, when hand and eye acted in perfect unison, and almost every shot meant an addition to the bag.

I have enjoyed many a good day's sport with the gun in different parts of the world, but never, before or since, have I shot so completely to my own satisfaction as I did once, some years ago, on a Queensland lagoon. I was staying at the time with a friend who was managing one of the big sheep stations on the Warrego, and one evening, over pipes and whisky, the talk turned on the black duck of Queensland, a bird somewhat resembling in appearance our own mallard, and every bit his equal in power of flight and ability to carry shot. D. mentioned that there was a lagoon about half a mile from the homestead, where there were always ducks in abundance, and suggested a go at them. Needless to say, I jumped at the idea, and we thereupon determined to make a start before daybreak on the following morning. We got out and inspected guns and cartridges, and put them on the office table all ready for business. Then we turned in.

D. roused me out about 5 a.m., and, hastily dressing, I followed him out. Luckily, I stopped for a moment to provide myself with a candle and matches, for I reached the office door just in time to hear D. go with a crash headlong over a packing case from which we had taken our cartridges the previous evening. However, he was not damaged, and we soon got our respective weapons and plenty of cartridges, and, after a cup of rum to keep out the cold, we made a start. D. led the way across the horse paddock and through the slip-rails, I following him close, and we soon hit a fence, which, he said, ran straight down to the left-hand corner of the crescent-shaped lagoon, at which point I was to start shooting. He struck out for the right-hand corner, telling me to allow him a quarter of an hour after I reached the water, and then begin to shoot as soon as it was light enough to distinguish the birds. I followed the fence down, getting wet through up to the waist in the long dew-soaked grass.

It was still pitch dark when I arrived at the lagoon, but I had not long to wait, for the dawn comes very suddenly in Australia. By its first faint light I could see five ducks sitting bunched together within thirty yards of me. I was just wondering whether to shoot when a bang from the other end did the needful, and announced the fact that D. had already got to work. The five rose *en masse*, but left two of their number behind as they flew straight up the lagoon. Three ducks, roused by one of our shots, next came my way, and I managed to account for two of them, one, however, only crippled; he had to be stopped at once, if we were to recover him later on. My next shot was at a single bird, which apparently found things too warm for his liking on the lagoon, and afforded me a pretty crossing shot as he winged his way through the trees scattered along the water's edge. Curiously enough, that was the only bird that morning which dropped on my hand. I picked him up and stuck his neck in my belt *pro tem.* All this time I could hear D. blazing away merrily, the reports of his gun gradually sounding closer. I kept working along slowly towards him, shooting as I went, here at a single straggler, there at a bunch of four or five. The ducks seemed to be thoroughly bewildered, and very few attempted to leave the lagoon; they kept flying up and down, backwards and forwards, running the gauntlet of a pretty hot fire at either end. Now and again a few would fly over the trees on the opposite bank, only to turn again and pitch on the water beyond us, rising once more at the next shot. At last I saw D.'s burly figure advancing among the trees. I greeted his arrival with a right and left that brought down two high-flying ducks with a splash into the water, and he signalled another that came with a rush from the reeds at his feet, where it had been lying *perdu*.

By this time the sun was showing amongst the trees, and as we stopped and looked up and down the lagoon, what a sight met our eyes. The calm surface was dotted with dusky, some with heads down and wings half spread, others huddled up like so many balls of feathers, others lying on their backs, feet uppermost. "Now for retrieving them," said D.; "for if we don't have them out, and sharp too, someone else will," and he pointed to an eagle hawk, who, sweeping down in ever-narrowing circles, was gradually drawing nearer the water, intent on a feast. We had forgotten that we should be our own retrievers, as we had no dog; so, pulling off our clothes, in we went, but the water, which in some places was thirty or forty feet deep, was so cold that by the time we had collected four or five birds we had had quite enough of it; so we dressed again, and whilst I kept a watchful eye on the eagle hawk, who still seemed intent on plunder, D. went back to his starting point, got the old punt out of the shed and paddled it along to where I was waiting, picking up his share of ducks on the way. Then I got in, and we worked up to my end of the lagoon, stopping every now and then to gather in the spoils. When we landed and had recovered my last remaining bird from the tree where it had planted itself, we turned up the bag, and found that we had a grand total of fifty-four ducks, honours about easy as regards numbers. We each fired about thirty-six shots that morning, and, allowing for the fact that we each stopped about five or six cripples, we did not waste many cartridges; and as we tramped home to breakfast I doubt if two more thoroughly satisfied sportsmen than ourselves could have been found that morning in the whole of Australia.

DACRYO.

THE AGGRAVATING RING.

THE following incident, which occurred to me during a recent shooting trip in East Africa, may be of interest as showing that the rhino in some parts of Africa can be very aggressive and decidedly dangerous, and also that he can be killed with comparatively little bullets. I may say that I have made several trips after big game in Africa, and am not one of those who consider every animal that chances to gallop in my direction to be charging, having killed a fair number of rhino, and never thought them particularly dangerous previous to my experience with them last August.

Being invited by Mr. Ryan to accompany him on a shooting trip, I selected out of a number that I saw the two with the finest horns and secured them. It so happened that when camped in Donyo Sabruk, a district some seventy miles or so south-east of Mount Kenia, on a certain day I found myself on the edge of a plain about a mile from camp, by no means looking for rhino, but in quest of meat for camp, accompanied by my two Somali gun-bearers and two Swahilis. We had spotted a very fine water-buck standing on the plain some 350 yards away. The grass was only about 18in. high, which meant a very careful crawl; so, leaving my men well hidden, I took my .500 Magnum Express, a weapon I always use for lions or large antelopes, and inserting a couple of 540grs. hollow points, I crept on a really difficult stalk. In about twenty minutes I was within 130 yards of the water-buck, which was luckily looking away from me, so I sat up, and, resting my elbows on my knees, was on the point of annexing his fine horns when a sharp snort to my left made me look gingerly round in time to see three large rhinos, a bull and two cows, come towards me; they had been lying in a fold of the plain barely twenty yards away. I sat with my rifle at the "present" and never moved a muscle, hoping they would fail to make me out and lie down again.

The water-buck was now looking inquiringly at the rhinos, a fine picture from nature, though my almost hopeless position, if charged at close quarters by three rhinos with a decided grudge, was uppermost in my hands, somewhat blurred it. My suspense was soon over, for with an angry snort from the bull they came at me full speed, all abreast, with the bull about a neck in advance. As I jumped to my feet I realised that my only chance was to stand up to them and try to kill the bull so close that his carcass would roll on either of the cows striking me. If I failed to kill the bull within three yards I was sure to be smashed up, but if I tried him say twelve yards off I was less likely to kill him, and pretty sure to be hit by one of the cows even if I did. All this flashed through my mind in a second, and the bull was barely six feet away when I pulled, with the bead nicely on the centre of his forehead, and I had just time to see him collapse like a cartload of bricks, and then was knocked almost out of time, being struck by his nose and mouth with the impact of his fall. The hollow pointed bullet had struck him in the centre of the forehead and had killed him instantaneously. In his fall he apparently collided with the cow on the off side, which the cow resented, that she galloped straight away. The other cow, however, swung round and trotted back to the dead bull, tail erect and snorting like a motor car. She winded me as I lay sheltered by the dead beast's head and neck, and as I felt too shaken to risk jumping up and dodging her round the carcase, I crawled away through the grass to where my rifle had been shaken some yards off, the cow accelerated by some vicious digs of the cow's horn, intended for my benefit, but which only kicked up a lot of dust and scored the dead animal's neck. She then picked up my wind, and, squealing loudly, walked slowly to where I lay. Fortunately for me, my Somalis, though not showing any Swahili courage, had usual pluck, ran to about 100 yards distance and yelled at the rhino. This made her turn her head to look at them when within about six yards of me, and I was quick to take the chance, catching her under the ear with my remaining bullet and knocking her clean off her feet. I was very thankful to be safely out of such a tight corner, and after some brandy had been fetched I managed to walk two miles through my left arm and side felt as if something were broken. There was, however, really no harm done except severe contusions, the effect of which took a fortnight to wear off, though, thanks to general fitness, it only cost me one day's rest in camp.

To show how close hits on my acquaintance with these rhino, I may mention that I had a silver cigarette case and a box of wooden matches in the pocket of my Norfolk jacket, of which the former was flattened in, and in the latter every match was broken. My Somalis and the Swahilis with me, who witnessed the whole thing at about 200 yards distance, told me they thought I was killed, till my second shot proved to them I was only knocked out. I had two more rhino on this trip, and was one evening gratuitously chased and hunted among some trees with his Somali gun-bearers by a pair of rhinos, told me that after this affair of mine his Somalis became very nervous and cautious about rhino for the rest of the trip, as was also the case with mine, whereas they had previously treated them with the same fearlessness with which they regard these animals in their own country. In this district rhinos were very numerous and peculiarly aggressive; still, it was, of course, a singular piece of bad luck to crawl unknowingly into such a dangerous position. On the whole we had a very pleasant and successful trip, our bag including lion, rhino, giraffe, eland, water-buck, wildebeeste, hartebeeste, impala, gazella Grantii and Thomsoni, Chanler's reedbuck, ostrich, zebra, warthog, hyæna, and crocodile.

N. B. S.

PROGRESS IN MODERN MILITARY RIFLES.

SIR,—With reference to "Critic's" letter in last week's issue, will you allow me to point out to this writer that I did not give "unstinted praise" to the back sight of the new Mannlicher-Schoenauer. The only reference I made to the sight was to the effect that it was "well finished and graduated." With regard to the objection raised by "Critic" concerning the liability of bending the leaf, I am afraid that I cannot agree with him; for, to take one such as he quotes to illustrate the point, a soldier advancing under fire would carry his rifle at the "trail," and in this position the rifle would be grasped behind the back sight! With regard to the other objections raised by "Critic," these seem to me to be matters which have yet to be proved by practical usage.

Referring to the letter of Mr L. R. Tippin, I assume that his objections to the new rifle relate to its value as a sporting weapon? Personally I do not regard magazine rifles as sporting weapons, and my remarks concerning the merits of the new rifle were confined to its value purely as a military weapon. With regard to the objection urged to one-piece stocks, the warping bogey has been trotted out, though I have never been troubled in this respect myself, even in the hottest climate, where the temperature averages over 95° for weeks together. Providing stocks are made of well-seasoned wood and properly fitted, I do not believe there is the slightest danger of warping. The alleged clumsiness of the grip in the new rifle is, I presume, an allusion to the width of the wrist-piece, I take account. Personally I find the increased width is an improvement, allowing as it does the grip to lie more comfortably on the heel and palm of the hand.

R. R. J.

SIR,—In your desire to be fair all round it seems to me that you have done rather more than justice to the Savage repeating rifle. In the first place, I believe that it was never claimed by the designer of this weapon that the rotating magazine was a novelty, and it is, therefore, somewhat late in the day to confer this honour upon him. At least Herr Schoenauer is absolved from the charge of getting his ideas from Mr Savage by the fact that he took out a patent in this country, No. 9753 (1884), which related to repeating rifles having a revolving drum or magazine. Even so, I am under the impression that very much earlier types of rotating magazines would be forthcoming if a proper inquiry were instituted, since the ordinary revolver action made such a development obvious in very early days of magazine rifles.

The exact definition of a military rifle is a little difficult to arrive at. Of course, all rifles adopted by military powers would fall within this category, and the Savage is only entitled to this distinction by its adoption in 1896 by the New York State militia. One of the main reasons why this type of under-lever weapon was adopted was because it was expected that the civilian people of New York State would adapt themselves more readily to the use of a rifle having an under-lever action similar to that of the sporting rifles so commonly used all over the States. The ordinary turn-bolt action, which is universally adopted by military powers, must be accepted, in spite of the opinion of the N. Y. State militia, as the most suitable method of locking the breech for rifles firing cartridges giving the tremendous back push associated with modern military ammunition. Bolt actions of this description provide an enormous leverage for the extraction of sticking shells. The quarter turn of the bolt handle, representing a travel of about two inches, produces a retraction of the bolt head of about one-sixteenth of an inch, which gives us a multiplication of the force applied to the bolt handle of thirty-two times. It thus happens that a 20lb. turning movement on the bolt handle produces a retracting force on the cartridge of 640lb. In the case of the Savage rifle this multiplication is sixteen times, and instead of being produced by a movement it is mainly derived from a rather fragile-looking series of levers.

The method of locking the bolt of the Savage rifle is of the kind which was condemned in your first article. I am entitled to assume this from your description of the Savage rifle, in which it is stated that "the recoil of the discharge is supported at U, and is in the direct line of the strain." This means that the whole weight of the bolt is subject to the stress of recoil, since the part U is at the rear end of the receiver. It has been recognised for years past that this is a faulty method for fastening the bolts of military rifles. The following extract from an official report issued by the U.S. Government in the year 1893 supports my statement:—"Bolts are locked either by lugs at their forward end engaging in channels in front of the breech casing, forward of the receiver and immediately in the rear of the chamber, or by lugs, blocks, or ribs, usually midway back on the bolt, which are supported at the moment of discharge by shoulders in the receiver or on its sides. In the first variety the thrust maximum is sustained just where it is applied by only one part of the bolt, and all behind that point can be made lighter, or the well of the bolt can be bored to a greater diameter, permitting the use of a larger firing pin and stronger mainspring. In the second form the force of discharge is transmitted along the length of the bolt, which, to have sufficient strength to sustain it and to obviate any tendency to buckle with the consequent binding, must be made of greater exterior diameter and weight, or must sacrifice some of its interior cavity and lose thereby the strength in pin and spring possible in the first form."

The writer has some knowledge of the methods adopted by committees who are called upon to examine military rifles. In the case of the Savage rifle he can well imagine them opening the under lever to the full extent, hitting it a smart blow with a hammer, so as to knock it out of truth, and then rejecting the arm as too fragile for the rough and tumble work of campaigning.

It is unnecessary at this date to enter into an argument respecting the relative value of a ten-shot magazine used as a reserve and the five-shot magazine loaded by clips. Your comparison of the two systems on the basis of ten shots fails to cover the ground, because at the end of that trial the ten-shot magazine is empty, and would take a considerable time to refill, whereas the five-shot magazine could be reloaded by means of a clip in a most instantaneous way. The best answer to those in favour of the ten-shot magazine is that a committee has been sitting for the past twelve months for the chief purpose of altering our new service rifle in this respect.

CRITIC.

SIR,—I have been very much interested in the articles in your issues of Jan. 26 and Feb. 9, also the way in which these have been illustrated, as they will tend to place the matter clearly before the sporting and military experts.

With reference to the revolving magazine, it would interest your readers to hear that in the early seventies the late Colonel J. D. Greene, of the U.S.A., had invented this method of magazine rifle, and in support of same I have the pleasure to inclose his Letters Patent, No. 2241 of 1874, which, I may add, he made some years later improved since then, but it tends to show that frequently the inventor is twenty years before the requirements of the service.

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