

YOU ARE STILL "DOUGLAS" MOTOR-CYCLE! See Offer
IN TIME FOR A "DOUGLAS" MOTOR-CYCLE! on page 24.

The MODERN BOY

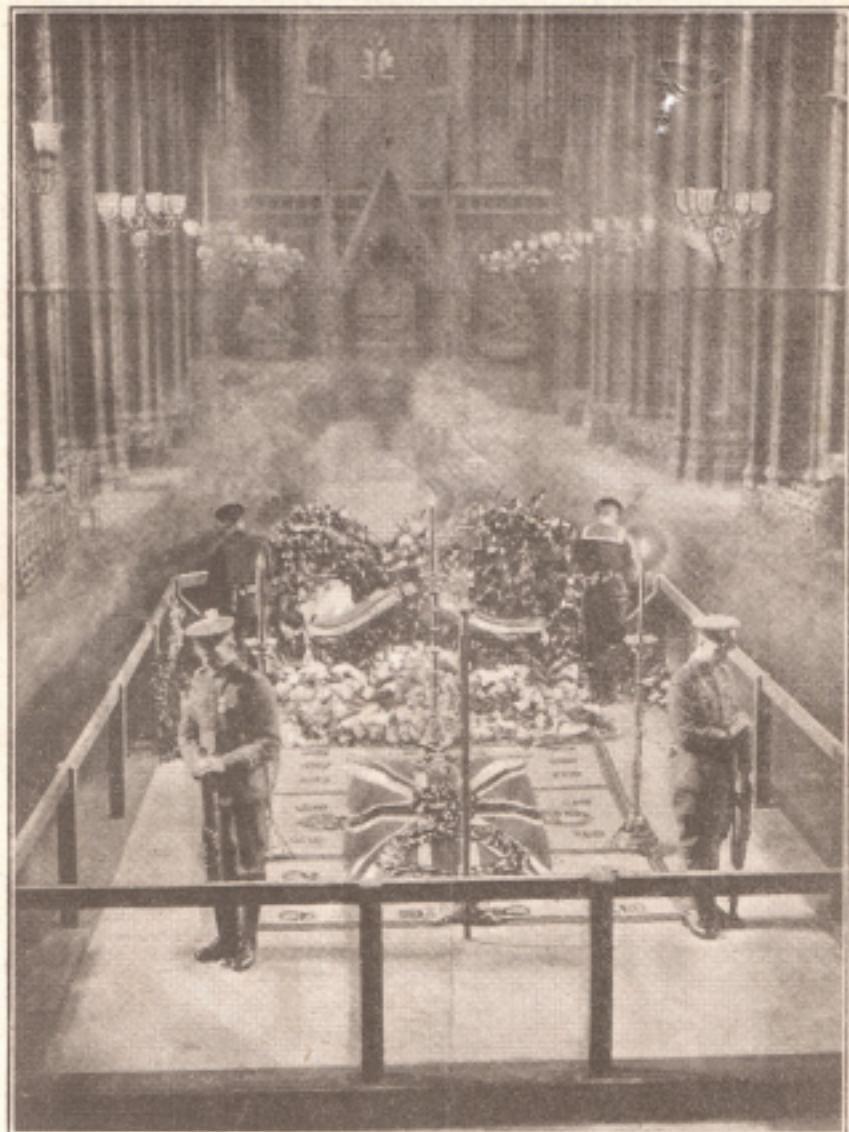
EVERY MONDAY.
Week Ending November 10th, 1928.

No. 40.
Vol. 2.



TWO MINUTES' SILENCE! Special Feature Within.

UNKNOWN BY NAME OR RANK.



On November 11th, 1920—the second anniversary of the ending of the Great War—was borne on his bier the Unknown Warrior to his last home with the famous dead in Westminster Abbey. The memorial service over, the grave was enclosed and four Service men—a bluejacket, a marine, a soldier, and an airman—stood reverently on guard, one at each corner. Then began a most impressive pilgrimage past the tomb of thousands of people in all walks of life. Slowly they

filed past the sacred spot, paying silent homage to those who had given their all in defense of King and Country. Naught was there to see but an embroidered pall and a Union Jack and many wreaths heaped high. But beneath the Flag lay one who was unknown either by name or rank, chosen from the War Dead at random as a symbol of the Great and Glorious Sacrifice made on behalf of the British Nation and its Allies. *Greater love hath no man than this!*

Two Minutes' Silence!

This stirring article brings vividly to mind the tremendous significance of the Two Minutes' Silence to be observed everywhere on Sunday next.

THIS crash of warroons—the rattling of a mighty wind, a sound kind of consciousness falling away to silence; engines running down, footsteps slowing and stopping, wheels halting, men's hands lifting as they bare their heads to the November sky and stand—thinking, the solemn Two Minutes' Silence.

Thinking, some of them, of the shells that burst ten years ago, of roaring guns and spattering rifles, of hearts and nerves, of battleships shuddering from their own terrible thunder.

Thinking, some of them, of lonely white crosses marking the resting-place of comrades who did not return from the Great War. Little white crosses on the hillsides above Beaumont-Hamel, in quiet corners around Ypres, in Flanders fields once seared by trenches, where red poppies now grow as though born of the blood seen had shed that the Empire might hold her freedom.

1,000,000 BRITISH SOLDIERS.

At the eleventh hour of the eleventh day of the eleventh month, ten years ago, the Great War ended. And men behind the firing-line heard a strange sound, the like of which human ears had never caught before. It was a sound akin to the crash of distant, titanic rollers on an endless shore.

It came from the throats of warriors along four hundred miles of battle-front. It was the sound of their cheering because the Armistice had been signed—and the Allies had won!

There were many who had marched to battle who did not cheer, because they had also marched to death. It is in homage to them that every human being in Britain stands silent for two minutes each year—in homage and thankfulness and all brotherhood.

Almost a million British soldiers died in the Great War, giving their lives that the world might be freed from the menace of further battles between nations. In all, the warring countries lost more than seven million men dead on the various fields of battle, and more than thirty million men were wounded.

The whole world was at war, and every

nation engaged has followed Britain's lead in ceasing all activity for two minutes, once every year, in honour of those men.

THEIR FATHERS' MEDALS.

Our greatest monument to our dead stands in Whitehall, and around that Cenotaph a great assembly gathers as the anniversary of Armistice hour approaches. The King and his ministers stand with bowed heads before the monument, old soldiers are near, sons wear the medals that their fathers never

on the morning of November 11th, 1918, still hostilities were to end six hours after.

For those six hours the War went on, with the Third Canadian Division fighting to win the town of Mons over the battlefield. It was at Mons that the Great War really began for Britain. It was there that our first shots were exchanged with the enemy, and from this town began the Great Retreat which told us that the War would be sternly fought to the end.

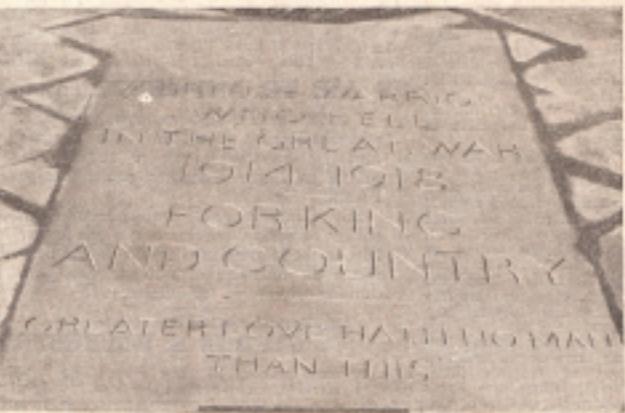
The Canadians wanted the War to finish where it had begun, that victory



This photo shows the famous "Old Bill" motor-truck—one of many employed to carry troops up to the Somme front in France and Flanders—passing the Cenotaph on route to Westminster Abbey—with a "silence" of the First Cenotaph.

crosses out in France and Flanders, in Salsiccia and the Balkans, Africa, and Egypt, and Mesopotamia, where men fought for our Empire.

The Armistice was signed at five o'clock



The simple but poignant inscription on the tombstone of the Unknown Warrior's grave in Westminster Abbey.

Lived to receive, and all join in a hymn of praise when the Silence ends.

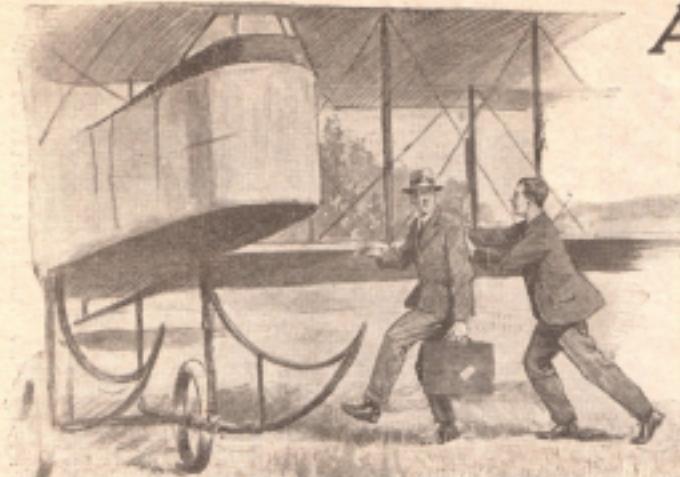
From every corner of the country men and women make a pilgrimage to lay wreaths at the foot of the Cenotaph and, afterwards, to pass by the grave of the Unknown Warrior in Westminster Abbey. No one knows the name of the man who lies there; he fell in the War and he was brought home for all people to reverence his passing, as a symbol of the honour in which we hold those who lie beneath the

right name for us where the threat of defeat had first loomed. They took the town. As they entered, the people lined the streets and rang jubilees which gradually merged into the stirring strains of "Tipperry"—the song our men sang when they marched to war.

It was fitting that the Great War should end for us where it had begun, and that its last, dread minutes should pass to the refrain sung by so many of our Glorious Dead!

A Hop —And A Flop!

"Go on!" urged Person. "Get up into the rear seat and I'll shake your suitcase up after you!" He prodded the unwilling and protesting Spencer forward.



"Hello, Spencer!"

"Ye be doin' well, then, Gargo?"

"Yes, Gaffer," replied George Person earnestly. "But I've been very lucky."

Gaffer—Gargo's neighbour and good friend—shook his head.

"Nay, lad," he said firmly. "It ain't luck; it's grit. I always said ye had grit, Gargo. And when you see lady—your aunt—comes here an' said as how ye wouldn't make a ha'penny wi' your flyin'-machine, I sees as how ye would. Didn't I, lad?"

"Yes, you did, Gaffer. You always had faith in me!"

"Ay," nodded Gaffer pertinently. "Ay. And for why? 'Cos I can see deeper'n most men—that's why!"

The old fellow was silent a while, sitting with his gnarled hands resting on top of his thick stick, gazing dreamily down the stretch of garden towards the hot and dusty roadway beyond.

It was very pleasant sitting there on the bench in front of Person's little cottage, lolling with heads plunged deep in the pockets of his grey, oil-stained furred bags, felt at peace with all the world. It was tiring just to be sitting there doing nothing for a while, after the crowded events of the past few days.

"Folks say," remarked Gaffer reflectively—"folks say, Gargo, that ye got a ha'p'nd'rs pounds for catchin' that there farriher what robbed Lady Marling."

"Yes. A hundred pounds, Gaffer," replied Person. "Fifty from the German police, who wanted the fellow rather badly, and fifty from the insurance company."

"A ha'p'nd'rs pounds'll keep a man a powerful long time!" salliquised Gaffer.

"Yes. But I don't want to use it like that," replied Person gently. "I've put it into the bank with the other money which I've made, Gaffer, and when I've got enough saved, I'm going to buy a jolly fine passenger-carrying aeroplane. I'll still keep my old Maurice Farman in use, of course, and that'll be a couple of bases I'll have."

"Then, when I've made some

great whacking big notice-boards, with 'Person's Passenger Service—By Air To Anywhere!' painted on 'em—just like I've got it painted on that notice-board stuck at the gate there!"

He nodded towards the garden gate, where a notice-board displayed that particular legend to all passers-by.

"And you'll come and see me, won't you?" he continued eagerly. "You'll come and see me just like you do now, and we'll discuss plans for the future like we do now, and we'll talk about the days when I just had the jolly old Farman and this tappin' little cottage and—

He broke off as a somewhat pale and inspiring sort of face, accompanied by a pair of gleaming spectacles, was suddenly thrust over the top of the garden fence and a voice demanded shrilly:

"I say! Does George Person live here?"

Person sprang to his feet and strode down the path towards the gate.

"Hello, Spencer!" he cried heartily. "Dash it, man! I wasn't expecting you till the next train. I was going to toddle along to the station to meet you."

"I caught an earlier train from Victoria," remarked Spencer, passing through the gateway and taking Person's outstretched hand. "But I say, George!" he went on, in aggrieved tones. "You do live an awful long way from anywhere, don't you? I've walked miles and miles!"

"Two miles, old bean!" grinned Person, possessing himself of Spencer's suitcase and leading the way up the garden-path. "Two miles, and not a blessed yard more."

BY AIR TO ANYWHERE! ☺☺☺

"Some day I'll build my own Aeroplane, with whacking big notice-boards with 'Person's Passenger Service—by Air to Anywhere!' painted on them!" declares young George Person.

But George's great ambition—with an ancient aeroplane, purchased as a job lot for £10, as the foundation of his air-fleet to be—means the following of a rough road, with startling adventures for milestones!

A jolly yarn, exciting and complete, by

GEORGE E. ROCHESTER.

more money, I'll buy another machine, and so on, until I've got a whole fleet of passenger-carrying aeroplanes—some of 'em fitted with luxury suites for millionaires!"

"That be a great ambition, lad," replied Gaffer enthusiastically—"ay, a fine ambition that be! Ay, ye'll do it!"

He had heard all the details of Person's great scheme many and many a time before, but it was a subject which he and the boy found always fresh and always enthralling. "And at first I'll test some old Army aerodromes," went on Person happily. "Then some day I'll build my own aerodrome, and it'll have

"Well, it seemed a frightful distance to me!" grunted Spencer. "I couldn't get a conveyance of any kind, either. I feel most awfully limp and fagged."

"Well, you sit and talk to Gaffer whilst I make the tea," replied Person eagerly. "Gaffer, this is Cyril Spencer. He and I shared a study at school last term. Cyril, this is my friend, Gaffer. No, don't do a bark, Gaffer. You're going to stay and have tea with us, then I'm going to fly Cyril over to Sunnendale, where two pals of his—Baxter and Binks—are camping."

"Sit Tight!"

"NOW," remarked Person, when he, the white-smocked Gaffer, and Cyril Spencer were seated in the little parlour of the cottage doing ample justice to a lavish spread, "what exactly is this camping stuff, Spencer?"

"Bug-hunting," replied Spencer laconically. "Treecle on trees by candlelight, and all that, you know."

"Eh?" demanded Gaffer, laying down a piece of cake which had been half-way to his mouth. "Treecle on trees, did ye say, young man?"

"Oh, yes! That's the way to catch moths, you know!" explained Spencer. "Attracted by the light, they hover about the tree and get all stuck up with the treacle."

"Just I've heard on't," replied Gaffer. "Best way o' catchin' moths an' sildike is to give 'em a good belt wi' your lat!"

"Oh, but that might damage them!" protested Spencer.

"Ay, course it'll damage 'em!" retorted Gaffer. "Kill 'em, it will. That's what ye want, ain't it?"

"Yes. But we like to obtain each specimen intact!" explained Spencer patiently.

"Sounds like a waste o' good treacle to me!" grumbled Gaffer frostily. "Give 'em a belt wi' your lat, see I!"

"Er—have these prime neices, Baxter and Binks, been camping at Sunnendale long?" interposed Person hastily. "You write such foul letters, you know, Spencer, that I couldn't get the hang of it."

"I stated quite plainly in my letter," replied Cyril Spencer coldly, "that Baxter and Binks have been camping at Sunnendale for a week, and that en route to join them I would break my journey here, and you could give me a flip the rest of the way in this aeroplane which you're bought."

"Oh, I see!" grunted Person. "But, I say, you've got a move, Spencer, to go under curtains with Baxter and Binks. The fellas couldn't even boil a kettle last term, so I don't know what your digestion's going to be like after a few days of their cooking."

"I shall cook!" remarked Spencer loftily. "I've brought a cookery-book with me which I picked up for tuppence at a second-hand book shop. It looks rather good."

"I hope, for your sake, that it is!" commented Person dryly.

Ten o'clock Gaffer took his departure, and went hobbling away up the road

towards his cottage in Sedcombe village. After washing up, Person led the interested Spencer to the field at the rear of the cottage where his Maurice Farmans was standing in front of the old barn which did duty as a hangar.

"Well, what do you think of it?" demanded Person, coming to a halt in front of the ancient biplane, with its flat, mach-patched wings, old Green engine, and multitude of flying and bracing wires.

"Hippin'!" replied Spencer, blinking through his spectacles.

"Yes, I thought you'd say that!" beamed Person. "She's a wonder really!"

"I don't doubt it!" agreed Spencer politely. "But where's your aeroplane, old man?"

"Aero-plane!" roared Person. "What the dickens are you banting about?"

"The aeroplane in which we're going to fly to Sunnendale, you

know much did they charge you for it?"

"Ten pounds!"

"Ten pounds?" echoed Spencer, scandalised. "You've been robbed, old man!"

"No, I haven't!" retorted Person warmly. "Just you jolly well wait until you've had a flip in the bus before you start slanging it."

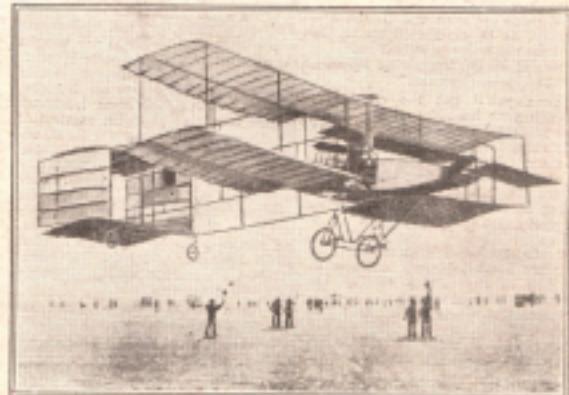
"Flip!" shrieked Spencer, backing away nervously. "What—is that? No fear! I'm not going for a flip in that thing."

Person's jaw jutted grimly.

"Spencer," he said, "you proposed going over to Sunnendale in my bus, and you're jolly well going in it!"

"I'm not!" blotted Spencer. "I—I didn't think it was a sort of flying sponge-box. I'm not going. I'm not a suicidal maniac!"

"Shut up!" roared Person. "You are going! It's as safe as houses. Bill and me have had hundreds of trips in it."



George Person's weird-looking aeroplane, with its flat, mach-patched wings, old Green engine, and multitude of flying and bracing wires, was not at all like so dilapidated as it is today. In its youth it did not look so very different from the great Henri Farman's plane, which you see here photographed in full flight in the very early days of man's flying.

know?" explained Spencer. "Where is it?"

Person gaped at the fatuous Spencer dumbfoundedly. Then he gave tongue:

"Why, you're looking at it, you crass ass!" he roared. "That's the aeroplane you're looking at—in front of your nose!"

"That!" exclaimed Spencer agog. "Oh crikey! I thought that was—a glider you'd been making out of sense space parts. It—it's not really an aeroplane, old man, is it?" he concluded pathetically.

"Of course it's no aeroplane!" roared Person. "A thundering good aeroplane, as well. What the dickens did you expect to see? A Hasselby-Page, or an Aero-Bi-Box, or what?"

"Where did you say you got it?" asked Spencer weakly.

"From the Air Ministry!" replied Person. "It's an old bus which they used for instructional purposes during the War."

"I see!" Spencer blinked harder than ever at the old Farman. "And

"Who's Bill?" inquired Spencer feebly.

"My dog!" replied Person. "He's over at Sloper's Garage just now. The poor little fellow got mauled by a tiger when Colonel Blackingshot his propeller off. You'll have noticed that the bus has been fitted with a new prop, and—"

"Person, old man," said Spencer sternly, "comes induces!"

"What for?" snarled Person.

Spencer plucked at the sleeve of Person's blazer.

"You've got a touch of the sun, old chap!" he exploded seething. "I don't suppose you realise it, but you've been racing about tigers and colonels and things. Come and lie down for a bit!"

"I'm set racing, ass!" retorted Person. "It's quite true about the tiger. I'll tell you the story later. Go on, get up to the rear seat and I'll shove your suitcase up after you. You won't need any flying kit, because it's a warm evening and I can't

A Hop—and a Flop!

get much above six hundred feet when I've got a passenger."

He propelled the unwilling and protesting Spencer forward.

"You—you haven't got a parachute, have you?" inquired Spencer hopefully.

"No, I haven't!" replied Person coldly. "But you needn't worry. We won't crash! Go on, up you get!"

Dumbly, Spencer clambered up to the rear seat. His face had a strained look about it. He ventured one last feeble protest.

"I—I'm certain I'm going to be air sick, Person!" he groaned.

"Well, as long as you're not sick we it won't matter much," replied Person unfeeling.

"Beast!" moaned Spencer, sinking as to the low rear seat and stowing his suitcase away as best he could between his feet. "What'll happen if we crash?"

"We won't!" remarked Person confidently, as he clambered up to the front seat in order to switch on.

"Not if we do?" persisted Spencer. "Just suppose, if we do?"

"Then you'll get the crankshaft through your back!" replied Person, with glibfifal complacency.

Blinking fascinatedly over his shoulder, Spencer watched Person swinging the heavy, four-bladed propeller. The old 35 h.p. Green engine picked up with a banging roar which set every flying wire and strut quivering.

Person clambered back to the front seat and settled himself down with his feet on the rudder-bar and his hand on the control-stick.

"Whereabouts is this tent of Baxter's?"

He reared to make himself heard above the noise of the engine.

"Nor—north of Summerville Woods," replied the pallid Spencer.

"Right ho! Sit tight!"

Person turned to his controls again and opened up the knee-handled throttle. The engine roared, sputtered, and banged in alarming fashion, and slowly the biplane commenced to lurch forward towards the nearest hedge.

Pressing on the rickety rudder-bar, Person swung into wind with the whole stretch of the field before him. He opened up the throttle to full, and with increasing impetus the old Moarrie Farman lumbered forward, jolting, swaying, and bumping. Spencer, with anguished glare, saw the ground whirling past, faster and faster.

As Person pulled on the control-stick the biplane came heavily into the air, then bumped to earth again. Person leapt the stick back, and the biplane executed another ungainly hop. Spencer got ready to jump. He was convinced they were going to finish in the hedge which was tearing towards them.

For the third time the Farman rose into the air, and this time it stopped there. With knees knocking and eyes peering, Spencer was borne away over the trees towards Summerville Woods, twenty-four miles distant.

And the banging clatter of the old Green engine marked the course he took!

Unexpected Battle.

NEVERTHREE, during the whole sixteen and one half years of his existence, had the wretched Spencer spent such a ghastly half-hour as that which ensued. He failed entirely to appreciate the glory of the sun setting red behind far-off Hamster Hill, and the mellowed location of pleasant meadows and shadowy copse were lost on him. Yet he viewed these things from a vantage point of six hundred feet of altitude.

That, of course, was the reticent part about it. He didn't want to view anything from such an altitude. At least, not from Person's biplane.

Never before had Mother Earth, dear old term firm, appealed to him so strongly. He peered down at it with longing eyes, whilst the old Moarrie Farman lurched, swayed, and disposed alarmingly as it clattered and banged its way towards Summerville Woods.

Now and again Person would believe some remark over his shoulder, either pointing out some landmark or else inquiring as to the comfort of his passenger. He was all right, reflected Spencer bitterly; he was used to it.

Never, never would Spencer have suggested the ship had he for one moment imagined that Person's aeroplane was such a frightful relic. He was so horribly conscious of that awful crankshaft behind his back. Suppose Person was wrong. Suppose they did crash—

With a moan, Spencer closed his eyes as the Farman dropped ten feet, like a stone, as it encountered an air pocket. Then, with a blast of alarm, he opened them again. The roaring rattle of the engine had died away, and the nose of the machine had dropped.

"Are—are we crashing?" he howled.

Person grinned over his shoulder.

"No, we're landing!" he replied. "We've arrived. I say, you're sure these assets are camping on the north side of the woods, aren't you?"

"Yes—yes!"

"Because," explained Person, "there's a tent away over yonder on the south side, as well!"

He pointed to a small triangle of white canvas in a distant field beyond Summerville Woods.

"No, Baxter said the north side," quavered Spencer. "There's a tent below us. That'll be it."

Then he hung on grimly as, circling widely, the biplane dropped lower and lower. There was no sound to break the stillness save the rumble of the quietly running engine and the swish of the wind through flying wires and struts.

At one hundred feet Person brought the biplane in from over the trees of Summerville Woods, and, banking, side-slipped down towards the tent which stood in the field below. Flattening out, he made a more or less smooth landing, and, giving the bus a burst of the throttle,

took it swinging in towards the tent, where it came to a quivering stop as he switched off his engine.

"Well, here we are!" he remarked, turning to Spencer.

"Yes, here we are!" replied Spencer, deep and heartfelt relief in his voice. "But, I say," he went on, blinking towards the tent, "there doesn't seem to be anyone at home. The flap's shut and tied down."

"You told 'em you were coming, of course!" questioned Person, chambering out of the low canopy-cockpit and dropping to the ground.

"Oh, yes, I told them!" replied Spencer, pointing him. "The rotters must have gone off somewhere. Dash it, they might have been here to meet us!"

"Anyhow," remarked Person, fastening the laced tent flap, "who expects politeness from Baxter or Blanks is an optimist ass!"

Throwing back the flap, he pealed his head into the tent. Two unmixed camp beds occupied the interior, together with a miscellany of cooking utensils which, dirty and unashed, lay scattered on the floorboards.

"Looks more like a pigsty than anything else!" commented Person. "Talk about slackers!"

"It's a pretty feel," admitted Spencer, inserting his head into the tent. "They seem to have left in a hurry."

"They do!" agreed Person grimly. "That's the kindest explanation of this mess. Come on, we'll clean up."

He and Spencer entered the tent and set to work to make the beds and to collect the scattered cooking utensils. They had been at it for about five minutes when voices were heard approaching.

"This'll be the rotters—" began Spencer, then broke off abruptly as a dirty, unashed and scowling face was thrust into the tent.

"He!" growled the face. "Ho! As very nice, too, I don't think!"

With that the owner of the face—a great burly tramp—stepped into the tent. He was followed by a colleague, equally unprepossessing as to appearance and attire.

"They're a-pinchin' of our valyables, Alf!" growled tramp number one.

"So I see, Erbert," replied tramp number two. "Cussed impsitans."

"Fancy comin' 'ere in that there airplane to rob two poor, honest, non-workin' blokes like us!" went on the gentleman addressed as Herbert, eyeing Person and Spencer menacingly.

"Swell mobsters, that's what they are!" agreed Alf.

"Do you mean to say that this is your tent?" demanded Person coldly.

"I does, we young cockspurites!" growled Herbert. "Wat shukt it—eh?"

"Are you sure it's your tent?" persisted Person, and his jaw was jutting grimly.

"In course I am!" roared Herbert. "Dyer link I'm a liar!"

"Yes, I'm afraid I do!" replied Person pleasantly. "I think this tent belongs to two friends of ours."

"Dash 'im, Erbert!" advised Alf.

wretchedly. "It 'im a cloth round the 'ead!"

"I'm a-goin' to!" promised Herbert earnestly. "But first I'm a-goin' to ask 'em if these two friends wot's says 'ems this 'ere tent isn't two spotty-faced, under-sized shrimps wir school caps on!"

It was a libelous description of Messrs. Baxter and Blaikie, but it wasn't too wide of the mark.

"That may be them," admitted Porson cautiously.

"Well, then," roared Herbert, "they're a-campin' away under on 'other side of the woods! Us has seen 'em, haven't us, Alf?"

"Yes!" agreed Alf. "See 'em there this afternoon!"

in the sheet sent him reeling back. Before he could recover his balance Alf crashed at him and swung a dirty and vicious fist. It took Porson full on the side of the head.

White-faced, Spencer leapt heroically to Porson's aid. But a blow from the wheeling Alf sent him, sick and dazed, with bleeding lips, against the tent pole. Then the two hooligans attended to Porson. The boy writhed twice, but he never had a chance. Twice they sent him down, and twice he staggered to his feet.

Again Spencer came to his assistance, and again he went reeling backwards out of the battle, this time holding his nose, which had been almost squashed by a savage kick-hander from the snarling Herbert. It was then that Porson went down for the third time and stayed down, all the breath and resistance knocked out of him by a vicious knee-thrust full in the stomach.

There came a terrific crack as the long flat wings of the plane hit the water. Next instant, Porson was overboard!

Then suddenly his sword clanged, and the tent rang with his vicious laughter.

"Ho, ho, ho!" he guffawed. "I've got it, Alf! Ho, ho, ho!"

"Cough it up, then!" commanded Alf.

"We'll make 'im take us for a ride is 'is airplane," replied Herbert. "I ain't goin' ter risk goin' up in the air, but we'll go round an' round the field like as if we was in a charybaug—see?"

"Ah, but," declared the cautious Alf, "we might take me up!"

"Not 'im!" snorted Herbert. "I'll catch him such a smack round the ear if 'e tries it!"

"I couldn't take two passengers up," interposed Porson, and his voice was strangely weak. "My engine's not powerful enough. I might manage a hop or two, but that's all."

"'Op?" questioned Herbert, puzzled. "Oh, I see!" he added, with sudden enlightenment. "Well, yer can 'op, but yer ain't goin' up!"

"I couldn't go up, I tell you!" reiterated Porson humbly.



Porson and Spencer exchanged glances.

"I—I'm sure Baxter said the north side," bleated Spencer nervously, "but he might have made a mistake, Porson. There is a boat, you know, on the south side of the woods. We saw it from the air."

"Well, we'll go and find out," said Porson. "If this really is your tent," he went on, addressing the scowling Herbert, "I'm awfully sorry we batted in! We'll shore off!"

"Ha, will you?" said Herbert merrily. "Just 'arf a tick, my lad! Wot about a little compensation for this 'ere trespass an' 'ossis' about in a honest bloke's tent—eh?"

"You'll not get a ha'penny from me," replied Porson coldly. "I've told you that my chum and I thought this was our friends' tent. I've apologised, and that's all I'm jolly well going to do!"

He attempted to push past the hairy Herbert, but a savage thrust

"There!" snarled Herbert panting. "Now we'll go through 'is pockets, bast 'im!"

A Perfect Pancake Drop!

THEY went through Porson's pockets with a thoroughness which left nothing to be desired. They only found fourpence-halfpenny, which seemed to quite upset them. However, they raided Spencer's person with more success, the loot being a passed note and some small silver.

"It ain't fair!" grumbled Alf, eyeing Porson, who was getting shakily to his feet. "It isn't fair, I say, that 'e should only pay a few brass coppers for this 'ere trespassin', and the kid in spec what ain't as cheeky and impudent should fork out more'n a quid!"

"Neither it are!" agreed Herbert scowling. "Pase and a 'arf blinkin' coppers! It ain't wuf it!"

"Mind yer don't try, then!" warned Herbert grimly. "Come on!"

He and Alf led the way to the old Massie Farmhouse. Porson, in their wake, winced bruised and swollen eyes towards the battered Spencer. With quip and jest and loud guffaws, Massie, Herbert and Alf encircled themselves in the rear seat.

"No funny business, mind!" said Herbert merrily, as Porson switched on, preparatory to swinging the propeller.

The engine, picking up with its usual clattering roar, drowned Porson's reply. Spencer noted his chum's grating jaw and peered deeply. He didn't quite see what Porson could do about things.

Clashboeing up to the front seat, Porson opened up the throttle. The old Farmhouse careered on more inexorably forward with increasing impetus. Faster and faster it went till it was rushing round the field at a good forty-five miles per hour, with

A Hop—and a Flop!

Herbert and Alf rolling elegantly in the rear seat.

Twice the old biplane completed the circuit of the field, but the third time Person pressed on the rudder-bar. The machine swung violently, side-board planes dipping wildly.

"Wot ye a-doin' o'd?" howled Herbert, as the Farmman charged straight across the field towards the hedge.

Person did not reply. He was hopping against hope that he could clear that hedge. Pulling on the control-stick, he sat tense. The biplane lumbered up into the air, the top of the hedge whipping against the tyred wheels of the under-carriage. Forward went the stick, and hopping heavily to earth in the next field, the Farmman went tearing across it.

"Stop!" bellowed Herbert, and lunged wildly at Person with a clenched fist.

But Alf's frenzied grip of panic impeded his aim. Three fields Person traversed, hopping heavily over each hedge. Then ahead lay the glittering waters of Deepdale Pond.

"E's a-goin' ter drowns us," yelped Alf shrilly. "E's gon' mad!"

"Leave go of me so's I can stop 'im, will yer?" roared Herbert.

But the panic-stricken Alf only clutched the stick.

There's not the slightest doubt that Alf would have released his grip on Herbert and jumped for safety, only the ground was whirling past at such a terrific rate that he was convinced he'd break his neck. So he stayed where he was; and as the biplane soared into the air from the very brink of Deepdale Pond he let eat a bowl of sheer terror.

But Person knew what he was doing. That last hop took him far out over the still waters of the pond. He eased the stick forward and snapped the throttle shut. The banging rear of the engine died suddenly away as the nose of the biplane dropped. Then back again came the control-stick.

The nose of the Farmman lifted. For an instant the machine seemed to hang suspended a few feet only above the water. Then it dropped like a stone. There came a terrific smash as its long flat wings hit the water in a perfect pataeke drop. Person was almost thrown out of his seat with

the jar of that landing, but his fingers closed on the switch and he cut out his engine.

Next instant he was overboard, striking out strongly for the nearest bank, whilst seventy feet or more from land the Farmman floated, with its impotent and wrathful passengers shaking their fists and bellowing invocations to Person to return and see what he'd get. Person didn't return. Reaching the bank, he clambered out, and, shaking himself like a dog, waded for Spencer.

"I don't think either of the rotters will be able to swim," he soliloquised, as he walked a few yards to pick up

a fallen bough from a nearby tree: "but if they can they won't jolly well get ashore."

Spencer arrived pantingly, and was at once dispatched to the nearest farm-house. He returned twenty minutes later with a dozen hefty farm labourers at his heels. Herbert and Alf were still aboard the Farmman, which floated where it had passed. They had preferred its securer to the ten foot deep water of the pond.

Salvage operations were commenced at once.

"I thought this was the north side," bubbled Baxter later that evening to Person and Spencer.

"Well, all through your fatheadness we've got a couple of black eyes between us," remarked Person coldly. "And—this."

He produced a couple of five-pointed stars, one of which he handed to Spencer.

"Who gave you those?" demanded Bisks, staring.

"Lord Summersdale's agent," replied Person. "After the police had locked up Herbert and Alf at Framlington they foisted a lot of snare and salmon nets and three-pronged hooks and things for poaching under the floorboards of the tent. They think the tent has been pinched as well. They're going to make inquiries about that."

"And do you mean to say your old rattatrap of an aeroplane isn't damaged after floating about that pond?" asked Bisks.

"Bashed!" snorted Person. "Of course it's not damaged. It was far too light to sink, and a jolly sight too well built to take any harm. I'll have to overhaul the bracing-wires and undercarriage, that's all."

"You seem to have rather an exciting time, don't you?" remarked Baxter.

"I do," murmured Person thoughtfully. "And if my bus wasn't fitted with a pusher propeller, I think I'd rig up a synchronised gun. It would be jolly useful I suppose, though, I'll have to wait until I've earned enough to buy an up-to-date machine—and that won't be very long at this rate!"

George Person gets a most unusual sort of passenger for his old ramshackle plane, as and Mrs. Summersdale's party, and finds himself embroiled in a field plot. Don't miss "The Plot of Primrose Farm!" It is a real George E. Rochester success!



Here's another common "biplane" put Right!

I WONDER how many of you fellows know that when you talk of "clouds of steam," meaning the billowy vapour that comes out of a locomotive's funnel and the safety valves of boilers and the like, you are really making a "bowler"?

It is a phrase in such common use that it is accepted by everyone. A man sees a boiler explode, and speaks of the cloud of steam which followed the explosion. Steam certainly did come out of the burst boiler in enormous quantities.

But ask the witness how he knows that it did, and the chances are that he will look at you pityingly, thinking you a halfwit, and will reply: "Because I could see it!"

Yet he is wrong. He did not see it, for steam is invisible. What he saw was the steam in the process of condensing back into water!

Steam is water at a high temperature and is a gaseous state. The moment it comes in contact with anything cold it gets more or less condensed and shows itself in a white vapour. This vapour which you can see has been called "water-dust," and it is not at all a bad name for it.

The fact that steam is invisible was proved by making a working model of an engine and boiler of glass. In the boiler the water could be seen bubbling up and down exactly as it does when it boils in an ordinary saucepan or kettle, but no "steam" was visible. Yet when the valve on the pipe between the boiler and engine was opened the engine commenced to work, apparently without cause.

Of course, it was not until the steam had done its duty and passed through the exhaust to come into contact with the cold air outside that it became visible in the form of "water-dust."

We are not all privileged to see a glass model at work, but there is a simple way in which we can test the above fact for ourselves. Stand by the railway line, on an incline, and watch the engines climb laboriously up the hill. As they thunder by, look closely at the top of the funnel.

Immediately above the funnel, although we know that steam is being forced out from it in great quantities, there is practically nothing to be seen. But a few inches higher up the chill of the air begins to take effect, and the "water-dust" begins to form, to blow away in dense white clouds that we consciously, but erroneously, call steam.

WHERE BRITAIN LEADS!



Photo: *Courtesy of Motor Cycle.*

THOUGH there are few sensational new motor-cycle models on show at Olympia—because for a number of years now British motor-cycles have been wonderfully safe, fast, and reliable—there are many ways in which the 1929 machine is better than its predecessors. For example, the steel-welded saddle tank is to be fitted to all but the cheapest models, for it is easier and easier to keep clean than the old-style tank.

Motors are faster and more silent, for now nearly all makers of overhead valve machines are enclosing the valve gear to silence it and to protect it from dirt. The two-part cylinder head which allows a graceful, plated exhaust pipe to sweep along each side of the machine will be more popular.

DRY SUMP LUBRICATION.

The modern fast-running engine requires a perfect lubrication system if it is to continue to give a high-power output for any length of time, and many of the latest machines are fitted with two oil pumps and a system of lubrication known as "dry sump."

The oil is pumped into the engine bearings at high pressure from a tank under the saddle, and after it has lubricated all the moving parts in the engine it falls to the bottom of the crankcase, where another pump forces it on through some filters and pipes, cleaning and cooling the oil before returning it to the tank.

Experiments extending over many months with this system prove that not only does oil consumption to be halved but it enables the engine to work better, as its interior is always bathed in cold, clean oil.

In the past the speedometer has been one of the most unsatisfactory

The finest collection of motor-cycles ever gathered together under one roof is now on view at the Great Motor-cycle Show at Olympia, West Kensington, London. Every fellow will learn a lot from this topical article by the MODERN BOY motor-cycle expert.

accessories, as it has been driven by a gear-ring clamped to the front-wheel spokes. Since this ring was seldom true when fitted, and as it was in no way protected from mud and rain, it rapidly became noisy and useless. The majority of the new machines have their speedometers driven from the gear-box so that the drive is protected and lubricated. Instead of fitting the head of the instrument is now let into the tank top, where it is readily visible, but out of harm's way.



Taking a big water-splash at a Motor Club Grand National at Halifax. It is the production of amazingly efficient machines that will put up with this sort of treatment that has placed Britain in the very forefront of the motor-cycle manufacturers of the world!

A wonder-bus that would gladden your heart. It is 12 ft. long, 4 ft. wide, 4 ft. 6 in. high. It is built by the British Engineering Co., Ltd., of Birmingham. An experimental model, it is not yet on the road.

You fellows who have tried to lift a machine of over 2½ horse-power on to its stand know how difficult it is, and you will therefore welcome the new style of stand that makers are showing for the first time this year. Instead of being fitted to the frame near the centre of the rear wheel, the new stand is attached to a part under the gear-box in such a manner that the machine can be rolled up on it without effort. In its old position the legs of the stand were often in the way when one wished to remove the wheel or tyre, but in the 1929 machines this defect has vanished.

300 MILES ON A GALLON!

Realising that the 230 c.c. engines of to-day give as much power as one of double the size did a few years ago, there is a general tendency among manufacturers to concentrate on the construction of 230 c.c. machines. These are light, small motor-cycles of 2½ nominal horsepower.

They will travel over 300 miles on a gallon of petrol and as far as 2,000 miles on a gallon of lubricating oil! Weighing under 200 lbs., they are taxed at only thirty shillings per annum, and cost but little more to run than a push cycle. They are so cheap that they make railway travel an extravagance!

Strangely efforts have been made to keep the price of these new mounts down to the lowest level, and the fellow who wishes to spend no more than £25 will find a wide range of machines to choose from. If you happen to have £25 you have a legion of types at your disposal, most of them capable of exceeding seventy-five miles per hour, and one or two reach the magic "eighty" mark.

Among the new lightweights the

Where Britain Leads!

Ariel "Cob" is one of the most interesting, for it comes from one of the oldest factories in the industry, which has, in the past, only specialised in medium-powered machines. This new lightweight has all the refinements of the larger models.

ENTIRELY NEW NOTE!

Going to the other end of the size scale, we find that there are still people who will buy a machine that costs round about £100. Such a recent, as exemplified by the largest model Zenith, Brough Superior, and Coventry Eagle, is replete with every luxury and capable of a road speed of about 100 miles per hour.

It is fitted with a powerful overhead-valve twin-cylinder engine, normally rated at ten horse-power, but actually capable of exerting over forty, a powerful electric lighting set and auxiliary brakes. Its workmanship and design are of the same order as that found in a thousand-pound car, and it is built for the fellow who wants the best, and the best only.

Perhaps the most outstanding machine in the exhibition is the Anco-Fulin, for this unconventional mount strikes us as entirely new both in design. Instead of being made of tubes the frame is pressed out of sheet steel, like a car's frame.

The brakes are actuated by rods and levers, as all those made hitherto

were, but by oil forced down armoured tubes at high pressure, so that when the rider places his foot lightly on the brake pedal both front and back brakes go on together. The method of frame construction encloses the whole of the mechanism and renders the machine as clean to drive as a car.

Protection is also given to the driver by the windscreen, big mudguards, and

LOOK OUT FOR—

The 1923 Model "Douglas" Motor-Cycle displayed at the Olympia stand of Douglas Motors, Ltd., to be Tested, Tuned for the road, and Presented to a HOMER ROY reader by "Sprots" Jim Kempton, British Champion Dirt-track Rider, on behalf of your Editor. Turn to page 24, this issue, for full particulars.

leg-shields. Fitted to the handlebar is a dashboard on which is mounted the tachometer, clock, lighting switch, and dash lamp. This four-two-wheeler is surely the most advanced machine of the year.

Rudge-Whitworth, Ltd., are a firm who have hitherto concentrated on a powerful 300 c.c. machine, and this year they are

showing this in a new form known as the "Ulster" model—in honour of its splendid victory in the Ulster Grand Prix when it completed the course at an average speed of 80 miles per hour. They are also exhibiting a new 220 c.c. and 250 c.c. lightweight. Something of a sensation is created by the new overhead-valve Dunchi, for in the past makers have placed their faith to the supercharged valveless two-stroke engine.

Such breakaway from accepted ideas show how fully alive the industry is and how eager everyone is to be right up-to-date.

Although, of course, the meteors of the road will always be recognised with affection by all below, the dirt-track racers that are being shown this year for the first time will be the centre of attraction. Among these is the magnificent twin-cylinder type D.T.R. Douglas on which Vic. Huxley, "Sprots" Elder and Roger Froyle have been as frequently victorious.

The silver-plated Rudge that has been so often seen on dirt tracks during the season is another magnet, as is the pretty Little Zenith, the frame of which, by the way, forms the basis of the firm's 1923 road sports machine.

The exhibition continues until Saturday, November 16th, and is open from 10 a.m. to 10 p.m., the price of admission being two shillings until 6 o'clock, and after that it is reduced to one shilling.

are termed "balance weights" on the coupled wheels.

These consist of two crescent-shaped plates filled with lead and are secured near the rims, being larger on the wheels which are directly actuated by connecting-rods and smaller on those which only have movement imparted to them by the coupling-rods. This arrangement of balancing weights causes much smoother running and more even wear of the wheel tyres, besides saving a great deal of strain on the engine-running gear.

The bogie consists of an independent "truck" comprising a frame and four small wheels. It is fitted to enable the engine to travel round curves of small radius, and is arranged on a pin which allows it to pivot round apart from the direction of the rigid upper part. Some bogies are arranged to allow a certain amount of side movement, so that when rounding curves the bogies are not in a true line with the centre of the engine itself.

A unique departure in the design of bogies was made in the case of the King George V., it being so arranged that the leading wheels are outside the frame and the trailing wheels inside. This was necessary in order to obtain the clearance for the cylinder. The bogie wheels are about 3 ft. 2 in. or 3 ft. 6 in. in diameter, as compared with 6 ft. 4 in. or 6 ft. 6 in. of coupled wheels.

ALL ABOUT Railway Engines



THIS week we will devote a little attention to the engine's undercarriage and running gear—that part which in motor-car language is called the chassis.

The chassis has to carry the boiler, act as a bedplate for the cylinders, axle-boxes, etc., and be the medium for transmitting the tractive power generated by the engine to the load to be hauled. It therefore has to be made of solid steel plate.

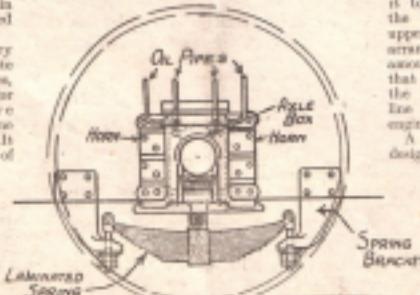
The frame is supported on the wheels and axles by means of axle-beams and springs. The springs, made of layers of steel in decreasing size, are attached at each end to the frame by means of brackets. In the centre they support the horns which connect the axle-box and "journal."

THIS WEEK:

THE FRAME, AXLE-BOXES, AND BOGIE.

The diagram shows exactly how this is fitted, and you will notice four oil pipes at the top. These are worked by a mechanical lubricator and serve to oil the horns and top of the journal, the undersides being oiled by a spring lubricating pad.

Balancing is very important, and in order to counteract the effect which moving parts, such as pistons and valves, would have on the engine, it is necessary to fix what



The secrets of the railway engine's driving-wheel revealed. The diagram makes the axle-box arrangement very clear, and shows how the frame of the engine is supported by means of axle-beams and springs.



Rough Justice!

Running the Reef.

GUVUNUKA lay a black mass against the starlit sky. Kea King, the boy trader, commonly known throughout the South Seas as King of the Islands, standing on the deck of his ketch Dawn, strained his eyes through the shadows. Not a gleam of light broke the blackness of Gurunuka. North and south it stretched, miles on miles of jagged and wooded hills beyond; but beach and palms, jungle and wooded hills were mingled in an indistinguishable mass. Only from the shadows, to Kea's watching eyes, came the white gleam of foam that tossed and leaped on the reef, where the Pacific rollers broke.

With the trade wind filling her sails, the ketch glided swiftly through dark waters that mirrored the stars glinting above. Gurunuka, on the far eastern fringes of the Solomons, might have been an island of the dead for any sign or sound to the contrary. Yet King of the Islands knew that the blackness of the beach might be swarming with unseen hordes of cannibals, led by Tamings, the chief, ready to hurl themselves upon the white men if they ventured ashore. And it was for the savage shore of Gurunuka that Kea was bound, as fast as the swift ketch could bear him.

The Dawn burned no lights. Her white sails glistened ghostly in the dim light of the stars. No gleam of red or green shot from her bows into the night. Kea intended to give no warning, if he could help it, to the savages who might be on the watch,

that the ketch was approaching Gurunuka.

Kale-lalulaloga, the giant Kanaka bos'n, known aboard the Dawn as Koko, stood at the helm like a statue of brass. The four Hirua boys who formed the crew stood ready at sheet and halyard, prompt to obey the boy trader's lightning order. Their black eyes searched anxiously into the shadows. From the gloom of the sea came the booms of the Pacific on the reef—and before long the teeth of the coral rocks would be rising round the Dawn. King of the Islands was all going to run the reef in the dark, that tossed and leaped on the reef in the dark, that rolled, where the Pacific rollers broke.

THE BOY SKIPPER

Trading and adventuring in his own ketch in the wonderful South Seas, young Ken King—King of the Islands—takes the Law into his own hands and administers stern justice to a trickster who has illicit dealings with the cannibals of Guatemala!

A really gripping yarn—

COMPLETE IN THIS ISSUE.

By CHARLES HAMILTON

and all the crew knew what that Hudson, might mean.

"We're close on the reef now, Ken!" muttered Eric Hudson, his young Australian mate. "We're taking a big risk."

"Not so big as the risk we shall be taking in half an hour's time, if Tamings and his brutes have come down from the bush," replied Ken.

"It's worth it," said Hudson.

"It's worth it, if what you believe is true," said King of the Islands quietly. "If the six cases we landed

here for Eric Peck contain guns and cartridges, instead of the trade goods we were led to believe—"

"I'm sure of it, Ken."

"I'm not sure," said King of the Islands. "But we can't afford to take the chance, with the lives of all the white men on the other side of Gurunuka hanging as it is. If there's gun in those cases, we've got to get them back if we can."

"We were taken in, Kea! That son-of-a-gun, Eric Peck, landed those cases on us because he knew that the grubbo' was watching for gun-runners along Gurunuka! I felt all the time that there was something fishy in the deal. And now—"

Koko's soft voice broke in. "Feller ship he stop along sea."

Kale-lalulaloga made a gesture into the shadows of the night.

"Feller steamer he stop?" he said.

Ken stared into the night, in the direction indicated by the Kanaka. He could see nothing but dim sea, hear nothing but the wash of the Pacific.

"He's dreaming," mumbled Hudson. "There's no ship here! What would a ship be doing here, lying outside the reef?"

"Koko savvy!" said Kale-lalulaloga. "Savvy plenty! Feller ship he stop! Feller steamer. See, eye belong me."

The Kanaka's eyes were as keen as the eyes of an albatross. But Kea was doubtful.

"What name you takes feller steamer he stop?" he asked. "Ear belong me hear nothing."

"Ear belong me hear nothing, all

Rough Justice!

"same white master," answered Koko. "No see feller wants, see feller farnel. Koko savvy."

"You savvy plenty? Melican steamer?"

"Savvy plenty! Melican steamer Silas K. Skaté, all same we see along Aya."

"Ema Peek here?" Ken exclaimed, starting violently.

The shipmates of the Dawn strained their eyes through the night. But at the shadow that Koko had seen over the tramp steamer from San Francisco, it was gone now. Ken eyed the steamer dubiously.

"You plenty sure you see Melican steamer, Koko?"

"Yesam."

"Koko's like a cat to see in the dark," muttered Hudson. "I thought I caught a glimpse of something—a shadow. If the American's here, Ken, what is Captain Peek doing of Gurunuka? He told us at Aya that his engine had broken down, and got us to carry on the cases of trade goods to Gurunuka; but if he's here—"

"I reckon he's had time to get his engines going," Ken said.

"But why is he here? According to what he told us, the cargo of goods consigned to old Santiago was paid for in advance, and he had no business at Gurunuka except to land them. We took them on board and landed them for him. What does he want here?"

Ken was silent.

"It's a proof of his trickery, if he is really here," said the Australians. "Six cases of trade goods would be worth a few thousand dollars, but if the cases contain guns, Ken, the gun-runners are sticking Tamango for a big sum—in pounds most likely. Having diffused as into landing the cases, Ema Peek has come along to collect payment. Tamango's due to pick up the cases on the beach tomorrow, and Ema Peek is here to be paid for them. All he wanted of us was to dodge the guard boat for him."

"It looks like it," muttered Ken.

"Let's run the case alongside, then, and have it out!" Hudson explained. "We must have passed within a few cables' length of him. Run alongside, Ken, and let's go aboard—"

"Think again!" said Ken quietly. "If Peek has fooled us into running guns to Gurunuka, I'd like to bring his monkey seek-as much as you would. But it's the guns we're after, and we can't afford to waste a minute. As likely as not, we're too late or it is."

"You're right, Ken! Keep on!"

Hudson sheath a clenched fist into the darkness, in the direction of the massive Tricon steamer. He lunged to plant it full in the bow, cutting face of Captain Ema Peek. But there was no time now to waste on the Yankee skipper.

"Feller reef be comey!" muttered Koko.

The Yankee steamer—if, indeed, Koko's eagle eyes had seen aright—was left for astern now, riding at her anchor. The reefs were under the bows of the ketch; and King of the Islands could give no thought

now to Ema Peek, or to the cannibals that might be lurking on the beach. Taking the ketch through the reefs in the darkness was a task that taxed all the nerve and skill of the boy trader.

Standing in the bows, his eyes on the dim, silent sea, and on the surf that boiled ahead over the reef, King of the Islands rapped out sharp staccato orders, instantly obeyed by steersman and crew. Harpoon caught his breath as the surf leaped and boiled round the glistening hatches. He had the fullest confidence in the skill of his shipmate, but it seemed to him that madcap of foam and spray must engulf the little vessel that glided and twisted and waddled. A moment's hesitation in giving an order, a moment's hesitation in obeying it, would have been fatal.

Once the Dawn scraped on hard coral, and every man's heart leaped into his mouth. But she scraped off and glided on. The jagged teeth of a reef rose in a cauldron of spray under her very bows; but the Dawn swung, with swinging boom, and eluded the danger. It was only a few minutes, but it seemed hours to the anxious crew before King of the Islands' ketch glided into the calm waters of the Gurunuka lagoon.

Blown to Bits!

KING of the Islands stared shoreward. A myriad stars gleamed and glinted in the sky, reflected in the waters of the lagoon, but the beach was dim in the uncertain glimmer. Well, within the reef the ketch lay at anchor, her cable ran out to a depth of sixty feet. From the deck, Ken could see the white glimmer of the beach—sand and powdered coral; the shadowy shapes of tall rocks; beyond, the blackness of the bush. No sign of life caught his eye. Gurunuka was dark and still as death. Only too well King of the Islands knew how deceptive appearances might be. But, as far as his eyes could tell him, all was still and the coast was clear; and in any case the risk of landing had to be taken.

The whaleboat had dropped softly from the davits. The Dawn was anchored exactly opposite the spot marked by two tall, pointed rocks, where the cases of goods, which the shipmates now suspected were guns, had been landed. Even in the dim glimmer of the starlight Ken could make out the tall rocks that masked the spot; and all was still in their vicinity. After all, the blacks were set due to collect the consignment till Friday—and it still wanted almost an hour to the dawning of Friday. King of the Islands had made a quick run from Aya and landed the cases early. If the blacks did not come down from the bush till daylight on Friday to collect them, all was yet well. And it was unlikely that Melanesian savages would stir before daylight, unless for some special reason. And naturally old Tamango was not likely to suspect that the skipper who had landed the cases had returned under full sail to take them off the beach again at all risks.

"The count's clear!" muttered Ken.

"If it's as clear as it looks we're an easy thing, after all. But I can't yet believe that Peek tricked me into running guns to the cannibals," confided King of the Islands.

"If that was his ship that Koko saw outside the reef, it looks like proof. But—"

"I'm certain of it, and I think we were lumberly swabs not to guess his game at the time," growled the Australian.

"Well, we shall soon see."

Ken and Kit entered the boat. Koko and Longo took the oars. The three Hiva-Oa boys left on board, with Bunny, the cook, held leafed titles in their hands; and it was hardly necessary to warn them to be on the alert. They knew the reputation of Gurunuka and its inhabitants; and in Gurunuka waters their heads did not feel secure upon their shoulders.

The cans clattered, and the whaleboat glided to the beach. Ken, rifle in hand, stood in the bows, watching the shore; Hudson sat in the stern, finger on trigger. But from the beach came no sound save the lapping of the waves.

The boat grounded in the sand at last, and the shipmates leaped lightly ashore. That a cloud of arrows might have greeted them they were well aware; or a rush of savage cannibals with brandished spears and war-clubs. But all was still and silent.

"We're on time!" breathed Hudson. "You feller Koko, stop along boat," said Ken: "Suppose feller nigger he comey, you wacky-wacky back along—not plenty quick."

"Tosar!" said Koko. "Feller Lempo, he wacky-wacky along ketch. Feller Kalalalalanga he comey dis along King of the Islands!"

Ken smiled faintly and tramped up the beach with Hudson. The Kanakas remained in the whaleboat, silent and watchful.

With all his iron nerve, King of the Islands felt a thrill at his heart as the sand and powdered coral cracked under his feet. If the blacks came down from the bush before dawn—

But there was no alarm. The shipmates reached the tall rocks behind which the cases had been placed, high above high-water mark. Dimly in the starlight they made out the cases, lying on the sand where they had been left, untouched, save that crabs were crawling among them. Hudson panted aloud with relief.

"We're on time!" he repeated. "We're on time! But if we'd waited for daylight to run the reef—"

"We've got to find out what's in the cases," said Ken quietly. "If it's only trade goods, as Ema Peek told us, we'll leave them where they lie, and we've had our trouble for our pains. If not—"

"No 'if' about it," grunted Hudson. "But we shall know in a few minutes."

Clang! Clang! Clang! The blows of the hammer on the cold skinned rang eerily through the silence, awakening the echoes of the lonely beach, flinging back in a thousand reverberations from the black wall of bush. To betray their presence was dangerous enough; but there was no help for it now. Ken dived in the

chisel and wrenched at it. Unscrewing the cases would have taken too long; daylight was close at hand now. The cases were strong and well secured; even with hammer and chisel and a strong arm it was not rapid work to open one of them. But Ken wrenches off slithers of strong wood, split under the wrenching of the odd chisel, and the contents of the first case were exposed at last.

As he groped among the thick packing his expression changed. His hands were hard and his eyes glinted like steel.

"Guess!" he said, between his teeth, and dragged a Winchester repeating rifle out of the long wooden case. The boy trader stood with the weapon in his hands, glistening in the sunlight, staring at it.

"Proof enough now, Ken?"

"My sainted Sam!" King of the Islands' voice was almost hoarse. "Send that Yankee villain is hanging on outside the reef, as Koko thinks! Send that I got a chance to lay hands on him!" The boy trader shuddered with rage. "Kit, if you hadn't got on to this, and fairly forced me to come back—My sainted Sam! Think of Tamango and his hordes of head-hunters with repeating rifles and cartridges in their hands, instead of bows and arrows and trade goods! Not a white man would have been left alive on Gurunuka in two days from now! And we—we should have done it!"

It was unnecessary to delve farther into the packed case; unnecessary to open the others. The rifle that had been taken out was proof enough of the contents of all. King of the Islands knew how the matter stood now; and he knew what he had to do. He stood up and listened intently. Deep silence had followed the emerging clangor of the hammer. Evidently Tamango and his men had not planned to come down for the cases before daylight. It's a daylight was a close now. Far in the eastern sky a pale glimmer showed that was not the stars. A new day was about to break on the Pacific.

King of the Islands put his hands to his mouth, making a trumpet of them, and hailed the whaleboat:

"You fellow Koko, you bring sack along boat plenty quick!"

"Yes?"

"You take plenty case along sack—dynamite no stop!"

"Me savvy, sac!"

Koko-Salalongsong came swiftly up the beach, carrying the tapa sack that had carefully placed in the whaleboat before leaving the ketch. The perilous contents of the sack did

not trouble Koko; he was used to handling dynamite. Except where the white man's laws forbade, dynamite is commonly used by the Islanders for fishing; and all through the islands innumerable men with rising hands or arms testify to the natives' carelessness with the terrible explosive. Koko carried the tapa sack as if it had been a sack of yams. King of the Islands took it hastily from him.

"You go back along boat."

"Yes?"

"Get off, Kit—no need for two here—"

"I'm seeing you through!" answered the Cornstalk.

Ken made no rejoinder; there was no time to lose. The pale glimmer in

"Ready, then?"

A spark glimmered. Side by side, the comrades raced down to the beach and leaped into the waiting boat.

The Kanakas needed no orders. Koko was standing ready, as he always off, exerting all his mighty strength, and the whaleboat shot out into the lagoon. A second more, and Koko and Loompo were tagging at the oars, making the boat fairly fly.

Struggling and pulling, Koko Push writhed in the powerful grip of the gigantic Koko!



the east had already become a pale flush. From somewhere in the dark bush came the note of a bird—the first note heralding the coming dawn. Daylight on Gurunuka might mean death—that day Tamango was to come down to the beach from his lair in the bush, and he might come down with the dawn. Koko, with a cool and steady hand, placed the dynamite sticks in the midst of the stacked cases, fixed the fuse, and then, for a second, paused.

"I'm making it a short fuse, Kit—the biggers may be close, for all I know. We're not taking chances—with the guns."

"Good!"

Like an arrow, the whaleboat shot across the glistening water, glistening now in the light of dawn. But they were less than half-way to the ketch when the crash came.

A flash—a deafening roar—and for an instant the blackness of Gurunuka was lighted up with a fearful radiance. Like thunder the roar of the explosion rolled over land and sea. Deafening sounds and flying fragments filled the air—splinters of wood, splinters of smashed guns, detonating cartridges rained down on the beach and hissed into the water—many falling round the whaleboat.

(Continued on page 163)

THE NEW LORD MAYOR OF LONDON.

This Week's Free Show !

ON Friday, November 24th, Sir Kynastan Studd, London's new Lord Mayor, rides in civic pomp to the Law Courts to receive the King's assent to his election to office. It is a custom over 700 years old, and the magnificent spectacle of the long procession of City officials passing through the streets of the Empire's capital is one that has delighted the hearts of the "gentlemen—and others!—ever since the days of Dick Whittington.

The last Lord Mayor's Day was an affair very different from the present pageant. Then the Mayor rode on horseback or went by water on his journey; nowadays, no show day would be complete without the great gold coach in which he rides.

A HIGH-SPEED MODEL

The Great Little "Chatterbox."

GO to the local yachting ponds on a fine, breezy day and watch the enthusiasts sailing their craft. You cannot help but notice how slow the model power-boats seem beside their sailing rivals. The big yachts go bowling along at a spanking pace, while the little steam-launches mostly crawl along, even when their fussy little engine is going "all out"!

But that is because they are not real model power-boats! Look at the one shown in our photograph. Outwardly, she is much like any other model motor-boat, yet she can do fifty miles an hour under good conditions! This little craft, the Chatterbox, is holder of the world's speed record for model motor-boats.

OUR PICTORIAL

MOTOR-BOAT AND AER

Gliders for 5s

IN no direction have there been so many new inventions lately as in motor-boat design. The new craft are called hydroplanes, and are a mixture of motor-boat and aeroplane. Many budding inventors have already taken out patents for their designs.

Hydroplanes, generally, are very fast, and it is quite probable that all the fast motor-boats of the future will be built on these lines, since they have a number of real advantages over the more orthodox craft. A famous French naval engineer even hopes to build giant liners on the same principles!

Below : This picture shows a boy looking at a model boat, while another boy and a man look on. In the background, a man in a top hat and coat is riding in a carriage pulled by two horses. Other people are walking on the street.



Top : A famous Show to which London is treated each November—the new Lord Mayor in stately procession riding through the City in his great gold coach.

There's not a lot of it, but what a beauty this 80 m.p.h. model motor-boat is! It holds the world's speed record for craft of its type and class.

ALL NEWS PAGES.

AIRPLANE COMBINED !

How Water.

At present the main practical use to which hydroplanes are put is for negotiating shallow waters. Instead of being fitted with an under-water screw, these water-giders, as they are called, have a propeller like an aeroplane propeller, driven by a small engine.

An ordinary water-screw can only function properly in boats of fairly deep draught so that it can get a "grip" on the water. A hydroplane needs no under-water propeller, and can, therefore, travel in shallow water; that is one advantage.

Again, a boat with a shallow draught

needs far less resistance from the water pressure than a vessel with a deep draught. Hydroplane designers take advantage of this fact, and make their craft skim the water rather than cut through it, and once again higher speeds are the result.

PRESS-THE-BUTTON RADIO!

Another Vision of the Future.

WIRELESS is becoming simpler every day, but in most sets it is still necessary for us to operate one or more variable condensers in order to get a certain programme.

The photograph below, of a set now obtainable, gives us a very interesting vision of the future. The set has no tuning controls, only a number of simple switches.

What will the radio set of a few

years hence be like? It will give us a choice of at least five programmes, there will be no "searching the ether" for them. Along the front of the panel will be a row of small switches marked with the call signs of the various stations. Pressing one of these switches will immediately tune our set to the programme we want.

The more expensive sets will do this work automatically. At the beginning of the evening our programmes will tell us of the various items from each station. Making our choice of these, we shall make a few adjustments to a small clock that will be part of the set.

So at, say, eight o'clock the set will switch itself on to London for a certain item. At eight-thirty the clock will get to work and switch over to Paris for another item. At nine-thirty the set will automatically return to London for Greenwich time, weather, and news!

ABOVE: WITH FIREWORKS!
The Crystal Palace—that huge edifice standing on the Southern Heights of London—is noted for its exciting fireworks displays, especially for the 5th of November. Here you see the Palace silhouetted against a background of soaring rockets and golden "stars."



Below: A small view of the very latest in wireless sets. It has no tuning controls. By altering the positions of two of the five switches and then pressing one of the eight buttons, any one of the eight different tunes that can be received can be received as the lead-speaker.

A happy fellow putting the finishing touches to his guy—a creditable piece of work that would seem to deserve a better fate than bunting!

Rough Justice!

(Continued from page 12.)

as it flew. The boat rushed on and thudded against the hull of the ketch.

Ken stared back. The tall, pointed rocks where the cases had lain were gone, blasted into fragments by the explosion. Of the cases, and what they contained, only raining atoms remained. King of the Islands smiled grimly.

He had been tricked into running the gant to Guruvanika. The guns were still on Guruvanika—in unrecognizable atoms. Captain Ezra Peek was not likely, after all, to pocket much in the way of profit on his running deal.

Called to Account!

EZRA PEEK stood on the bridge of the Silas K. Skate, straining his close-set, sharp eyes through the glimmering dawn. There was amazement, wonder, alarm in the thin, keen face of the Yankee skipper. The roar of the explosion had died away; a thousand echoes had become and died into silence; but the screaming of startled seabirds still filled the air. Ezra Peek stared and wondered. Every man on the tramp steamer was staring, too.

"Dog-gone my boots!" said Ezra Peek. "What in thunder was that? What do you reckon it was, Jacobs?"

"I guess it was an explosion," answered the mate.

"I reckon I don't want telling that, you gray!" Ezra Peek snorted.

"What's been blown up? Tell me that, you gray?"

"Unless it was the cases."

"Them cases couldn't blow up. There was cartridges in one of them, but cartridges don't blow up of their own accord, I guess. And they wouldn't make an all-fired thundering row like that if they did. That was dynamite."

The mate shrugged his shoulders. The mystery was beyond him, as it was beyond Ezra Peek.

Far across Guruvanika, on the western side of the island, was the white settlement—a trading station, copra plantations, and a store. In the store there, undoubtedly, was dynamite—probably plenty of it. But the explosion had not come from there. It had roared out on the eastern side of the island, on the beach that was nearest to the Yankee tramp steamer. It had occurred near, or actually at, the spot where the "cases of action" had been landed; Ezra Peek knew that. But he rejected the idea that the cases had been blown up. There was nothing in the cases to blow up; it was impossible. Ezra had it been possible, Ezra would have rejected the idea. The destruction of the cases spelled the loss of his expected profits; and that was a thought that the Yankee skipper could not, and would not, entertain until he was driven to it.

But what had happened? Ezra Peek strained his eyes through the darkness. Sunrise came swiftly on the Pacific; but Ezra cursed its slowness as he strode to pick up the binoculars beyond the reef with his binoculars.

Over the horizon, at last, sailed the sun; and it was day, light flooding the wide ocean, sparkling on the dashing surf of the reef, lighting the lagoon and the beach, lifting the shadows of the bush and the forest beyond.

With the glasses to his shifty eyes, Peek stared and stared. He swept the beach, but failed to pick up the pointed rocks, the agreed place where the cargo was to have been landed; where, he knew, it must have been landed long ago by King of the Islands. Ezra Peek knew Guruvanika, and he knew those pointed rocks, long a landmark in those unfrequented seas. He rubbed his eyes and looked again and again. The landmark was gone—the tall rocks no longer existed. It was there, then, that the explosion had taken place. Ezra, though he had fiercely rejected the idea, had had a feeling in his very bones that it was so. There had been the explosion, and the cases of gun and cartridges.

"Dog-gone my boots!" he repeated faintly.

But he could not understand. That King of the Islands had landed the cases in the appointed place he was sure. That the bay-trader had sailed away long before the Silas K. Skate arrived he was equally sure. On that lonely beach, avoided like a plague-spot by all white men, what could have happened to the consignment? Back into Ezra Peek's mind came the recollection of a sound he had heard an hour before dawn—the sound of cracking Steele's, of a rattling boom. He had fancied then that some windjammer had glided by in the darkness; but the improbability of any skipper running the reef in the dark had made him conclude that his fancy had deceived him.

Some vessel had run the reef into the lagoon in the night. He knew that now. The consignment of rifles and cartridges had been blown up; so terrible an explosion that massive rocks had been shattered to fragments by it. He knew it now. Dust and atoms remained of the guns that had been run to Guruvanika.

The Yankee gun-runner trembled with fury. He was there to collect payment for the guns—in the morning hours a canoe was to come off with the pearls from Tamingo, payment for the consignment. The canoe would not come now. Tamingo's pearls would never see the inside of the Yankee skipper's strongbox. The Guruvanika chief would not pay for a consignment of dust and ashes. When the blacks came down from the bush and found what awaited them on the beach, Tamingo would return to the distant fair in the interior taking the pearls with him. Ezra ground his yellow teeth.

Then, as he swept the lagoon with his glasses, across the reef, he picked up the ketch.

"King of the Islands!" he spluttered.

He understood it all now. That son of John Bill, over whose eyes he had so cleverly pulled the wool at Ara, had "tumbled." It was the ketch that had passed the anchored

steamer in the night. King of the Islands had returned—to destroy the consignment of arms and ammunition.

Ezra Peek could see it all now, and he almost danced with rage on the bridge of the Silas K. Skate.

"The durned gisk!" he gasped. "The pesky gisk! Oh, gee-whiz! The goddamned scallywag!"

The ketch, so solitary before, was not solitary now. From the bush wild savages had emerged—black men in loin-cloths, with spears in their hands, their wild eyes staring towards the sea. No doubt they had been on their way to the beach; and the roar of the explosion, coming to the farthest limits of Guruvanika, had brought them running to the scene. King of the Islands had not escaped too soon!

The ketch was under way now, tacking for the reef passage. She was coming out of the lagoon.

King of the Islands' work was done, and he knew better than to remain there till the savages could have brought canoes round to the spot.

More and more of the blacks appeared from the bush. There were twenty or more in sight now, brandishing their spears and uttering loud yells. They came running down to the beach, yelling.

Ezra Peek slammed down the glasses with a bitter snarl. This was the party that Tamingo had sent to collect the consignment at the appointed time, and all they would find was a shattered beach, shattered rocks, and fragments of wood and iron. He was glad that the reef and the lagoon lay between him and the blacks. Dealing with Tamingo was a risky business. The blacks had come for the guns. But any white man caught on the beach would have gone to the seeking-ovens. Had King of the Islands been still there—

But he was not still there. He was standing on the deck of the Dawn, tacking across the lagoon for the reef.

Ezra Peek gripped the revolver that swung at his hip. In his rage he would have been willing to run down the ketch as she emerged from the reef passage and swarm aboard with his crew and shoot down King of the Islands and his mate on their own deck. He glanced at his men with that savage thought in his mind for a moment. But it was futile. His crew, half of them lascars, the other half the riffraff of San Francisco, were not the men for such wild work. If Ezra led them they would not follow. And Ezra knew, in spite of his fury, that he was not the man to stand up to King of the Islands in deadly fight. He was a cunning trader, an unscrupulous gun-runner, but he was not the man to face determined foes in a fight to the death.

He ground his teeth and re-dispatched the revolver-belt. King of the Islands had beaten him, as he would have expressed it, to a frazzle, and he was to get away with it. After what had happened, after the loss of his inglorious profits in the deal with the savage chief, he was to see King of the Islands sail away into the Pacific, uncaptured. With furious eyes he watched the graceful ketch winding through the reefs.

His expression changed as he noted that the ketch, instead of making for the open sea, was heading for the Silas E. Skates.

He had realised, with bitter fury, that he must let King of the Islands escape, because he dared not bar his way. But it came into his mind now that it was not escape that the boy trader was thinking of. It was Ezra Peek himself who needed to think of escape. The ketch was running alongside.

Ezra stared at it blankly. He had not dreamed that the ketch might attack him. The little craft was not a third the size of the tramp steamer. The crew numbered but eight men all told, counting the cooky-boy. But every man on the ketch was armed with loaded rifle, every face was grimly set, and Ezra Peek, in amazement and dismay, realised that it was an attack.

"Gee-whiz!" said the mate Jacobs. "They're coming for us!"

"Jerusalem!" said Ezra Peek faintly.

The ketch ranged alongside. There was no time to get stowed up and escape, if Ezra Peek had considered that. He was taken by surprise by the action of King of the Islands, and the ketch swooped down like a swift-sea-hawk, and was alongside the steamer, swinging at her stern-anchor, before the Yankie skipper fully realised that it was war.

"Ahoy, the steamer!" Ken's voice was shouting.

"You durned sea-lawyer!" snarled back Ezra Peek. "You pecky son of John Bull! What have you done with my cases of goods?"

"Blown them to bits, you gun-running scoundrel!" answered King of the Islands. "The coming aboard you!"

"You durned pirate! You chop a foot on my deck and I'll sure drill you full of holes!" yelled Ezra.

"Fire a single shot and look out for squalls!" said King of the Islands. "You fellor boy, you hear one shot, our belong you, you fire plenty quick, kill dead every fellor alongsteamer!"

"Yessar!" grinned the Hiva-O boys.

"You durned pirate!" gasped Ezra. "I'm comin' aboard to square accounts with you, Ezra Peek. I seen business, and I'm ready for a fight to a finish, if you and your men are. Take your choices!"

There was a scuttling and patterning on the deck of the Silas E. Skates as the gun-runner's crew rushed for cover below. Ezra Peek and Jacobs, the mate, stood silent while King of the Islands hopped lightly on board.

Ken Meets Business.

KING OF THE ISLANDS faced Ezra Peek, his sneerer in his hand, his eyes gleaming at the enraged, foxy face of the Yankie skipper.

Ezra was stuttering with rage and dismay.

Kit Hudson stood on the ketch's deck, rifle to shoulder, the look on his grim face telling how ready he was to pull trigger. The Hiva-O boys were equally ready, and the gun-runner's crew had scuttled below for safety, making it quite clear that

(Continued on the next page.)

The "GLORIOUS FIFTH"!



Laying the foundations of a firework Félix?

Did you know that it takes eight or nine years for a firework maker to become thoroughly proficient at his job? Yes, it's an art, producing those squibs, cracklers, catherine-wheels, and weird and wonderful pyrotechnic novelties which this week will be hanging and blazing everywhere in commemoration of misguided Guy Fawkes!

A big firework factory consists of numerous small sheds each serving a distinct purpose—offices, store-rooms, carpenters' shop, the magazine containing trained explosives, and "danger sheds" where the fireworks are actually made. All the workers (to what is known as the explosive area are clad in non-inflammable overalls, with large nailless boots covering their own so that if they step accidentally on any fallen grains of gunpowder there will be no friction likely to cause an explosion.

Fireworks are made to-day in much the same manner as they were centuries ago, almost entirely by hand. It is chiefly the cardboard cases for great big fireworks that are made by machinery.

Two of the oldest forms of fireworks still in favour are the jumping cracker and the rocket. The narrow empty case of the cracker is first rolled on long cylindrical tubes, the gunpowder then being poured in through a funnel. Flatened between the rollers of a hand press, the cracker is then bent backwards and forwards over a horizontal row of small rods of the thickness of knitting-needles. All that remains now is for the cracker to be bound round and round with string and fitted with a firing cap.

Rockets are charged to-day as they used to be in the sixteenth century, for no machinery has been invented to beat the old-fashioned hand method. Briefly, the composition is poured into the rocket case, which is constricted at one end, and in carefully measured quantities, each of which is numbered in to make it solid. For sky-rockets a ring is fitted containing the stars.

The wonderful effects produced by Russia cardinals are due to repetitions of Roman candle fuses, "dark fire," star, and a blowing charge. In putting these into the Roman candle case great care has to be exercised that everything functions correctly and that the different stars shall rise approximately to the same height. In such candle the layers of the various compositions differ in quantity from the bottom to the top. As each fuse burns with a fountain-like effect and becomes exhausted, it sets light to the "dark fire." This in turn flashes round the star next to it and reaches the blowing charge which forces the star from the case.

A simpler process is adopted for getting a realistic fire-breathing effect from the Chinese dragon. Using a measuring ladle smaller than a teaspoon, a worker fills the dragon's "body" with a light brown substance, adding alternate layers of a different mixture. The "body" is then sealed at the ends and sent to a finishing shed, where the dragon is given its blue firing cap.

In addition to these and the many other novelties for the "Fifth," firework makers are busy all the year around making huge sets and clever pyrotechnic displays that are to be seen at the Crystal Palace, London, and elsewhere. Some of these workers have been fifty years at their jobs. Their years of experience are put into even the smallest firework—which is gone in a moment with a flash and a bang!

Rough Justice!

They did not intend to risk their lives in a quarrel that was not theirs. They were paid—not liberally—to work the ship, not to engage in a fight to the death. Ezra Peck was bristling as his own to face the storm he had raised.

His grip was on his revolver, but he did not draw it. The mate, Jacobs, leaned on the rail, his hands in his pockets. It was not his funeral, as he would have expressed it. Ezra Peck had only himself to rely upon if it came to a deadly fray, and Ezra's heart was sinking within him. He could face without flinching the prospect of a savage outbreak on Guavankuk, of a white man's settlement overrun by murderous savages, of trading-station and planters' bungalows going up in flame, of white men's heads smoking in the smoke-houses of Tamiago. But facing the resolves of King of the Islands was another matter. Ezra gripped his gun, but it remained where it was.

Ken, his revolver half raised, was ready. He had come to call the gunner to account, and he was ready for anything that might come. But it was only a glint of rage that he received from Captain Ezra Peck.

"You durned sea-lawyer, this is piracy!" gasped Ezra. "You dare to come aboard my ship?"

"Cut all that out!" Ken snapped. "You're a gun-runner, and if the British gunboat had found the cases on board you'd have been taken before a British court, with ten years in prison before you. You tricked the gunboat by fooling me into running the guns to Guavankuk." Ken turned his hand towards the distant beach and the crowd of staring savages. "There's your cargo of guns. No use to Tamiago now. I was in time to save the life of every white man on Guavankuk. You won't collect payment from Tamiago to-day or any day."

"Get off my ship, you dog-gone pirate!"

"You've got to answer for running guns to Guavankuk," said Ken quietly. "I'm here to make you answer for it."

"You durned guy! And how are you going to prove that I ever had any guns on board this hooker? What's left on that beach won't prove anything, I guess."

"I know all that. I've no intention of handing you over to justice when I've blown to fragments the proof of your villainy. I'm dealing with you myself."

"You durned pirate!" said Ezra lamely. "What—"

"Get aboard my ship!" said Ken, pointing to the ketch. "You've been beaten this time, but you'll be running guns to Tamiago again if you're let. I'm going to take care that you don't. Get on the ketch!"

"I guess not!" snarled Ezra Peck. "Do you figure that you're going to kidnap a skipper on his own dock?"

"Call it what you like. Are you going?"

"Napal!" yelled Ezra Peck.

"Koko!"

"You sat?" Koko-lululeaga leaped from the ketch, a grin on his face.

"Threw that scoundrel on the Dawn!"

"Plenty quick, ear!" grinned Koko.

Ezra Peck, in sheer desperation, dragged out his revolver.

Crack! King of the Islands fired at the instant. The revolver flew from the Yankee skipper's hand, crashing on the dock, and Ezra Peck, with a yell of pain, clasped his right hand with his left. There was no case of crimson through his horny fingers.

Koko's mighty grasp clased on the skipper of the S.S. E. State. Ken's eyes glittered at the Yankee mate.

"You chipping in here?" he rasped.

"I guess not," answered Jacobs.

"You're wise," said Ken grimly.

Ezra Peck, struggling and yelling writhed in the powerful grip of Koko-lululeaga. Koko bore him to the side so easily that he had been an infant, and tossed him down to the deck of the ketch like a sack of yams.

Ezra landed there with a crash. There was a ripple of laughter from the Hiva-Oa boys.

Ken fixed his eyes on Jacobs.

"I'm compelled to maroon the whole gang of you and sink this hooker at her anchor," he snarled. "You know what would have happened on Guavankuk if Peering had got the guns. I warn you to keep clear of those waters after this. I shall send a full report to the British Commissioner—and you won't find them easy sailing. Get out of British waters—and keep out, you Frisco scum."

"I reckon I'll beat it as soon as I get aboard up!" drawled Jacobs. "What you going to do with the Old Man?"

"That's my business." Ken walked down to the side, and leaped down to the deck of the Dawn. A minute more, and the mainsail was up, and the ketch was floating away from the tramp steamer.

Ezra Peck, sickening his torn hand, spluttered with fear and fury.

"You kain't do this!" he howled. "It's kidnapping—it's piracy on the high seas—you durned firebug, you kain't do it. You——"

"Belay your jawing tackle!" snapped Ken. "Ezra, a'posse feller Peck ke open mouth before him, you give'm plenty of rope."

"Yessir!" grinned Koko-lululeaga, picking up a rope-end. And Ezra Peck was silent.

Marooned!

THROUGH the long, blazing day the ketch fled on, over wide waters where there was no land. The night came, but it brought no sleep to Ezra Peck. Through the starry night he watched with haggard eyes, wondering what King had in store for him.

Another day dawned on the Pacific. The ketch was still keeping the same course—floating over to the north-east by a wild waste of waters. Ezra's haggard eyes watched the sunrise and watched the sea.

The Hiva-Oa boys gave him mocking looks; but King of the Islands and Hudson took no notice of him by so much as a glance.

"Feller had to come." Koko's voice gave the call towards sea.

Out of the assure sea, north by east, rose a purple patch. As the ketch flew on, the patch became a group of nodding palms. It was an island—one of the innumerable tiny atolls scattered like specks on the Pacific—uninhabited, for from all other land, without even a name. But it was known to King of the Islands.

The ketch glided on, and dropped anchor off the reef. Koko's face was set like stone. He knew now!

The whaleboat was lowered, food was placed in it and a bag of water, an oar, a knife, and other things useful to a castaway. Then, for the first time, King of the Islands spoke to Ezra Peck:

"Get into the boat."

"I guess not!" snarled Peck. "I guess I ain't going to be marooned on that durned island. You pokey pirate!"

"Ten years in prison is your fate!" said King of the Islands coldly. "You'll find a Pacific atoll better than that; you're lucky. You've got your chance, such as it is, of being taken off when a sail comes this way. It's a small chance, or I shouldn't have picked this atoll to maroon you on. You won't run guns to the cannibals of Guavankuk again in a hurry. You'll be safe out of mischief here."

"You dare not!" shrieked Ezra Peck. "You——"

"Put him into the boat, Koko!"

Ezra, struggling, yelling, shrieking, was tossed into the whaleboat. Loompo and Lulu beat to the oars. King of the Islands watched grimly.

In the whaleboat Ezra Peck was gesticulating, saying, pleading. The boat pulled steadily on and grounded on the sand.

The Yankees skipper was lifted ashore by the Kanakas; the supplies that had been apportioned him were placed in a little heap on the beach, and the whaleboat pushed off.

King of the Islands' face did not relax. It was not only for the punishment of past villainy; it was for the prevention of future villainy that the gunrunner was marooned. Some day, no doubt, he would be taken off the lonely atoll; Ken was willing to leave him that chance. But Tamiago would wait long for another consignment of guns!

The whaleboat pulled back to the Dawn and swang up to the davits. The cable dragged homely up—a sound of despair to the desperate man who stood on the beach watching the ketch with stony eyes. The sails were shaken out. Loosely on the white beach stood Ezra Peck, shaking a desperate fist after the ketch as she glided away into the boundless Pacific!

(See page 16 in *next week's issue!*
If you haven't already done so, give your arrangements instructions to receive
MODERN BOY for you every month—
to-day!)



Two New Chums Down Under!

A Real-Life Adventure in the Australian Bush.

Told By

TOM ROGERS.

Oward we were, with the
great bush fire at our
backs!

The Doomed Homestead:

"CLEAR everything out of the house!" panted Bill Jarrett, the son of the farmer. "There's nothing else can be done!"

The woman they called "Aunt" raised poor old Andy to his feet, and we could see that tears had made furrows in the grime on his cheeks. Now that his great stack of hay was ablaze there was not the slightest chance of saving the home he had built. All that we could do was to fling a few buckets of water on to the wooden wall of the building facing the blazing stack; it was impossible to fetch and carry more. But the water steamed off again almost as soon as we threw it on, so terrific was the heat from the burning bay.

All the while we ran grave risks of getting our own clothes ignited by fuming wisps of straw that swept past us on the wind. The

house must soon go, and Bill Jarrett and young Ginger Blair, the farm handyman, started the work of clearing the home of furniture.

"C'mon, ye soft new chums!" panted Ginger. "Put them paits down and give us a hand wi' somethin' useful!"

The rest of us then set to work, old Andy and his sister as well. The furniture, the best of the kitchen utensils, crockery and linen were piled some fifty yards from the front of the house, where the ground was all cleared, and part of the stuff covered by some old waterproof sheets pegged down over it. The aunt herself thrust the most precious of their small personal belongings into pillow-cases, which she stowed under the seat of the buckboard—a four-wheeled vehicle not unlike the American buggy.

As we got the last things out of the homestead the heat within the place was terrific. The wooden wall

TOM ROGERS and Pad Brannan, two chums from the old land in Australia, presented a holiday from the ever-mounting farm chores. They are employed by Farmer Cliff, go off into the bush with Mack, the farm dog for company, Cliff leading three mares and goat, spicing, calling at Judge Jarrett's farm-house for supper, they are caught in a rushing bush-fire and join the farmer and his men in trying to save the homestead.

nearest to the blazing stack was browsing with the heat, and suddenly that side burst into a great sheet of flame.

The main bush fire seemed periodically near as we saddled up the whinnying horses. To the north-west a million threatening swords of flame waved above the great forests; rivers and pools of fire, surging and spreading, weaved strange patterns in the grasslands. The Jarrett boundary fences were afire. The haystack had been almost demolished, and now the house itself presided the big bonfire near to hand for illuminating the night!

Old Andy and his son Bill harnessed a couple of horses to the buckboard, and the homesteader, his sister, and young Ginger Blair took their seats in the vehicle. Meanwhile, Joe Cottis helped Pad and me to saddle up our horses, which, terrified of fire, were inclined to be fractious. Finally, Bill and Joe, who

Two New Chums Down Under!

kitted his own few belongings, packer-fashion, to the rear of the saddle, mounted and led the way to the shallow river.

Our own horses bolted and got ahead of them, and drank greedily of the water. Pud's steed took it into its head to roll over in the shallows, giving my pal a docking which I secretly envied! Directly the horses had been watered Andy drove the buckboard along a dusty path leading from the south-east corner of the farm, and the four of us on horseback trotted swiftly along after him. Mack, the kelpie dog, bringing up the rear. Smoke from the fires rolled past us in choking clouds, and strips of flaming bark sailed by like meteors in the night.

The dusty track went through an arm of scrub dotted with trees. As we rode onward, with the great fires at our backs, we saw the amazing sight of hundreds of robins trekking away from the danger. Now and then we saw lizards and snakes slithering along in the same direction, and sometimes a few wing-wearied cockatoos went screaming harshly away on the wind. All living things were impelled only by one law—the law of self-preservation and the fear of the foe most dreaded by all wild creatures—fire!

As the buckboard jolted on ahead young Ginger, seated in the back of it, considerably annoyed as by commenting on our method of horse riding. In his opinion, it was all wrong.

"D'ye see how ye have yo stirrups too short?" he said to me. "Perhaps ye fancy ye'ld' as a pockey, laddie?" To Pud he remarked: "Hey, ye fat gowk, are ye not aware ye dimma ha'e ta hold the reins up level wi' ye shoulders?

Keep yo big hands down on the saddle-horn neck. Ye're more like a sack o' spuds bumpin' in the saddle than anything!" Every time ye bump up I can see six inches o' light under ya. When we get to town I'll buy ye some glue to fix ye down!"

"And I'll buy you some sticking-plaster for your face when I've finished with it!" booted Pud.

But our throats were so dry and we from breathing the hot smoke of the fire that we could scarcely speak. And how Ginger managed to keep up a running fire of comment without becoming exhausted was amazing. To us, physical effort of any sort, even speaking, was sheer pain, and it was difficult even for us to keep open our bloodshot eyes as we rode after the buckboard along that smoke-swept trail.

Fortunately it was that it was not all woodland between the fire and ourselves, and areas of grass and scantly scrub checked the flames.

Back where the forest was unbroken the fire raged on with a speed which would have overtaken the fastest horse, flames leaping with lightning swiftness from branch to branch and tree to tree. Aiding the work of destruction, the wind carried on the burning fragments and flew charged brackets, bark, and twigs, for many miles ahead. Birds, beasts, and reptiles, unable to travel fast and far enough because of thirst or weakness, were ruthlessly destroyed in a hurricane of heat before ever, the flames reached their shrivelled bodies.

A loud chattering cry burst out from a big pepper-salt-gum to our left, and we saw a thing which looked rather like a plump fox with a bushy grey tail climbing along a boagh, with two small creatures clinging to the back. It was an opossum—so Joe Cottis said afterwards—and the audaciousness of its cry further terrified Pud's sweating horse, which leaped to one side and, with a loud whinny, bolted.

By the craggiest luck, strained a fore-leg in a rabbit burrow!

"Yess'll have to leave that horse to feed for himself, cobber," said Joe Cottis handily. "There's nothin' as can be done for it, and it'll have to get along as best it can."

The abandonment of the horse was a stern necessity, for assuredly our own lives would pay the penalty for any serious delay. Joe "coo-oo'd" loudly to attract the attention of the buckboard, which had got out of sight, and himself took Pud on his horse behind him.

Naturally, with one horse weighted by a double burden, the speed of our flight before the fire was reduced, so much indeed that the lame animal was able to keep fairly close behind us. Presumably, Andy Jarrett and the others in the buckboard, and Bill, who had ridden on ahead of them, heard nothing of Joe's "comes"; in the shrieking of the hot wind through the trees, for we saw no more of them.

In a general direction we were heading for the Murray River, and after three appalling hours we entered an area of light scrub, backless gum-trees, and strange cliff formations. Dotted about in this wilderness were a number of cement-like mounds of pale-grey colour, some of them six feet in height. They were the houses of the termites, or white ants, as we knew, because we had seen many of them during our previous journeys through the bush.

In this small wilderness of a valley where we found ourselves the heat was less intense, for the cliffs to some extent ward off that scorching wind. Nevertheless, the night was terrifying with smoke and burning fragments, and the horses, grown more tired, were maintaining little more than a fast walking pace.

"There's someone coming this way!" Joe Cottis suddenly exclaimed.

THE GREAT IDEA—Series of Inventions that Changed the World. No. 12. GLASSMAKING.



Glass, which is a mixture of sand, earth, and lime, was first made in India. This illustration shows Phoenician sailors making a vessel on the beach. The glass was melted over a fire and then poured into a mold.



Above is shown the old process of making a glass bottle. Molten glass is taken up in a cleft wooden trough and then thrown back into the trough again until it is expanded lengthwise. When it is withdrawn it is put into a mold and then into the oven to cool and shape—a long and tedious process for the making of a single bottle.



For hundreds of years molten glass was made in this way. Now the majority are made by machinery. The illustration above shows the blowpipe, which consists of a series of tubes. The glass is blown into the tube and then cooled and shaped. It is then passed to another until it emerges a complete bottle.



Here you see the process of making sheet glass. Molten glass is passed on to a sheeting table, after which it goes through an annealing furnace to cool. It is then broken into pieces, as shown in the lower picture. The sheet of glass is then reduced to size and the pendant cylinders wear away the rough surface.



The abandonment of Pod's injured horse was a stern necessity. And now, with one horse provided by the drivers, the speed of our flight before the great fire was pitifully reduced!

Neither Pod nor I had seen or heard any sign, and it seemed incredible that anyone else could be near us in this far-scrubbed country, which seemed like some place not of the world but on the borderland of the fiery pit itself!

Our ears sharpened, and we heard a series of sharp crackling sounds similar to the splintering of branches in the fire or the distant reports of a rifle.

"That's a stock-whip," Joe remarked. "Some other poor rooster is beating it out of the warn, I suppose."

A few minutes later there appeared from a gallery between the cliffs a wagon drawn by six sweating mules, and driven by a man as begrimed as ourselves. We turned our horses towards him, and Joe recognised him as a squatter who lived some thirty miles north of Jarrett's homestead, a man whose real name was Smith, but who went by the extraordinary nickname of Sniffer Scarface.

The reason we saw for ourselves. An old car which Smith himself claimed had been honourably gained in Gallipoli during the Great War—but which others said he had received from the knife of a Chinaman whom he had ill-treated—gave the left side of his mouth a most curious lift. As the result the profile of his face seemed to be wreathed in a permanent smile, and the effect was weird and unpleasant.

"Hullo, Scarface!" croaked Joe. "How your place gone up, too?"

"The whole blessed country's gone up," Scarface answered, slackening speed with his mule team and putting up the eighteen-foot stock-whip he carried. "And I've heard there's been some bad happenings to folk in the Murrumbree district."

As we rode alongside, Joe learned from Scarface that he was heading for Thandan, on the Murray River.

"I expect my boss will make for there as well," Joe said. "And now, Scarface, can you give a lift to this young blake, Pod Brummond, whose horse has gone lame? He and his pal have been working with us like good 'uns."

Sniffer Scarface agreed. Pod went into the light wagon with him, and Joe rode on to overtake the party with Andy Jarrett.

Although the lame horse was making good progress it was soon left behind, for the mule team travelled at a clinking rate among the sparse gum-trees. Their grimy driver said nothing to us, but merely by the cracking of his stock-whip, plus a remarkable flow of language, guided them over the best ground and prevented the fight from becoming an absolute panic.

To me every yard of that journey was an agony, for I had been fearfully saddle-sore before reaching Jarrett's homestead, and matters were worse now. Pod had suffered as severely as myself; but he was not so badly off, stretched on across saddle in the wagon. In less than half an hour my own horse croaked from the heat and fatigues.

"Drop your eyes!" panted Scarface, holding 'em' in his fractious mules. "You'll have the whole blessed lot of us roasted yet, you young snipe! Hitch that horse to the tailboard of my wagon and tumble aboard, and for the love of Mike be smart about it!"

Mumbling my thanks, I did as I was bidden; then, lifting Mark, the dog, into the wagon, tumbled in myself. The horse, relieved of my weight, bounded along, kicking at the end of a halter as the freshen mules raced on again; but after a few minutes I sat him stiffly to save him from being dragged off his legs. With these great fires swiftly eating up the country behind us we could afford no more delay.

"Cranks, what a holiday!" graped Pod, as the wagon lurched onward. "How much more are we to have of this?"

The answer came dramatically within five minutes. A flaming strip of bark swung down on the wind and alighted full on the haunch of one of the rear mules of the team. The sharp pain of the burn caused the animal to emit a piercing agonised cry, swinging sideways, and lash out with its hoofs, catching one of its fellows a glancing blow on the leg.

Scarface lashed out with his great whip, but this time even he could not control the panic into which the whole team was swept. In a frenzy of terror they raced onward, with the wagon bumping madly through the brambles and over the knobby roots of trees.

While Pod and I were flung about like peas in a shovel, Sniffer Scarface bellowed threats in what sounded like Chinese. Certainly we were now outdistancing the fire; but this mad race could not last for long. Suddenly, passing between two giant gum-trees, the mules swung sharply away to avoid a tree-stump directly in their path. In doing so they swung the wagon round in a semicircle; the near-side front wheel crushed tall against the cement-like wall of a white ash mound and smashed completely from its hub.

As the wagon dipped the three of us and the dog were flung out like Indian clubs, the traces snapped—and away west the panic-stricken mule team, while we, together with a useless wagon, were left in the track of the flames!

(In all that roasting country, with blazes roaring to overtake them, there seems no possible help for Tom and Pod and their companions in their mortal predicament. Next Monday's *MODERN BOY* will tell you how the *adventurers* fare after this last great calamity.)

The ISLE of PERIL!



BY
STACEY BLAKE.

OUR GREAT SERIAL STORY!

New readers can start it to-day! The opening chapters are briefly retold on the opposite page.

The Newcomer.

In size, the newcomer that had trapped Tom, Billy, and the professor in the iguanodon's skeleton was not to be compared with the creatures they had already seen, but in horror of aspect it was as the product of some incredible nightmare. It might have weighed as much as an ox. Of lizard shape, squat on the ground, with a long tail, perhaps no more than twenty feet in its entire length, but with an amazing erection of spines, joined together with a lightning movement that rose from the middle of the back to a height of four feet or so, and extended from head to tail, this creature's head was a balloon thing with great tufts from the upper jaw that hung over the lower lip in the most startling manner.

While the eyes, like a pair of big red planes, almost at the top of its head, set back towards the beginning of the frill of spines. In color it was a dirty, spotted green.

"*Blastodraco!*" gasped John Meredith, in an awed whisper. "It is found in the Permian of Texas."

"It ought never to have survived!" shuddered Tom, as the creature came nosing at the bars of bone like a cat trying to push its face into a canary cage. It was too big to get between the ribs. It snarled, clamped its horrid jaws, went back a little way, and came charging down on the cage of bone!

The skeleton shivered; but in weight it was enough to resist the impact. The creature's spines rattled like choppers. It pawed the ground and threw up tufts of earth, and came again, growling ferociously at the iguanodon's bones.

"Think! A survival from the Permian—the form that existed a hundred million years ago!" went on Professor Meredith, with sheer amazement in his voice.

"There's a fractured rib here!" pointed out Tom. "If the brute has sense enough to try getting through at that spot there won't be my survival for us!"

John Meredith was adjusting his camera. More interested in the opportunity of getting a picture than in the probability that the gigantic creature would tear him to pieces if it got the chance, he exhibited his autohook and made rapid extras, while the savage creature gashed its teeth outside and struggled to break the bony cage that protected them!

"We are caged all right!" said Billy helplessly. "That ugly brute has only to wait long enough for us to be starved to death! I'm hungry now!"

"Yes, and we only need another of the things a size smaller to come along, and he'll square between the ribs and finish us off!" answered Tom, with equal cheer.

The professor was watching the amazing creature with scientific ardor.

"Look at the formation of those teeth! Aren't they splendidly formed for the work they are intended to do?"

"Yes; they'd tear us up like a row of steel knives!" agreed Tom, feeling white and shivery all over. "He's going to have another shot!"

Forming at the mouth, with bubbles coming from between the horrid teeth, the beast was attacking again. It rose up on stony legs, with grotesque spines rattling, and tried to tear down the bones that were between it and them. The teeth were all gleaming wet as the mouth was pushed up against the bare ribs of their shelter.

"There's nothing to be immediately nervous about," commented John Meredith calmly, continuing to write without pause.

And then the savage reptile gave a push to the skeleton that set it shivering.

"It's only got to topple this over and we shall wrinkle out like pens through a ridge!" cried Tom.

"It is not likely to think of that. These creatures are practically brainless."

"But it's beginning!" broke out Billy.

The thing was biting at the skeleton. It started the bones rocking. The massiveness was just getting dangerous when it ceased this trick and stood back a little way, with its plum-red eyes peering like red-hot balls.

Their rifles lay aside, where they had propped them against a tree while the photographs of the skeleton were being taken. In Tom's pistol were only empty cartridges. Their only weapons were the axe and the long chopping-knife—pretty poor instruments against a creature as powerful and well protected.

"What are the chances of rushing out and collecting a rifle?" Billy suggested.

"Too jolly risky," Tom said, shaking his head. "He'd catch you sure. The brute can run like a rabbit. Now, if we had that knife fastened on to a bit of a pole we could jab him when he came near. Stop a bit! Let me experiment."

When the fierce creature began again to worry at the great, curving ribs, Tom took a risk himself. He stepped out on the other side, with the axe in his hand. And he was outside for a dozen seconds before the fact seemed to dawn on the senseless brute. In that time he had clapped off, with a couple of strokes of his axe, a slender stick of bamboo, and he was inside the shelter of the mighty bones before the blastodraco could scuttle round to the other side.

"What's this scheme?" asked John Meredith, shutting his notebook.
"I'm going to fasten the knife to a length of this bamboo and make a spear of it!" said Tom grimly. "I've tired of doing nothing!"

Professor Meredith took a dose of snuff with a good deal of relish and adjusted his monocle.

"Have you heard how they catch sharks among the Eastern pearl-divers?" he said. "A swimmer takes into the water a stick pointed at each end. When the shark opens its mouth to bite, the swimmer pushes this stick, upright, into the shark's mouth, and when it shuts its jaws they are pierced top and bottom by the pointed stick, and it can neither open its mouth nor shut it. Isn't that an idea?"

"It sounds good enough," cried Tom, "if you know a way of doing it, I don't."

"Then I'll show you," said Billy thoughtfully. "I think I've got the notion. Is that bamboo tough enough to make a sharpened stick?"

"No; it's green. And, being hollow, it won't do. It means finding a piece of tough wood. Or what about a piece of bone—if we could split it a length with the axe?"

"Bone would be all right, but the knife-blades would be better."

Billy pulled a clasp-knife out of his pocket, a real hefty tool, with a six-inch blade. He opened it and laid it beside the big chopping-knife.

"I'm hanged if I can see the scheme!" said Tom seriously.

Billy tied the two handles of the knives together with string.

"There's your stick pointed at each end," he said, "only the points are knife-blades."

"That looks all right; but how do we get that double point between the house's jaws?"

"Give me about six feet of that bamboo—the lighter end, so long as it's stiff. Perhaps I can do it. This is the idea."

He split and forked one end of the bamboo. The two knives, with the points of the blades sticking out in opposite directions, he fastened fairly in the middle to the end of the pole so that in shape the arrangement was like a letter E.

"Fine!" cried Tom. "You'll push that out when the beast has got his mouth open, and let him chew on it? But will he?"

"We'll soon see."

It was a breathless moment. Unless they could kill or incapacitate this dreadful creature, they might be held prisoners here for an indefinite time till some mightier reptile, that could tear the skeleton to pieces, came along. Billy tried, and miserably failed.

"The beggar is getting tired, and losing his ferocity," he complained.

"He's not opening his mouth!"
He wants exerting a bit," said Tom, pushing out what remained of the bamboo stick and thrusting the

end of it against the great nostril. The creature snapped, and bared forward with open mouth.

"Now!" cried Tom.
But Billy failed again, and John Meredith added the pole.

"My wrist is perhaps stronger," he said.

"Then I'll give you your chance, sir," Billy said.

And he squeezed out between the nearest pair of ribs and exposed himself for a second or two to the master. The fierce reptile sprang into swift movement, and came for him with open mouth. He leaped into the skeleton, and the professor thrust out the pole; but the jaws snapped together just at reach.

The chance came again presently. The great mouth, with its tearing teeth strip with foam, opened wide, and John Meredith thrust in the double-pointed affair beyond the rows of teeth. The jaws crashed down with tremendous force, and the knife-blades, top and bottom, sank in.

The bamboo was plucked out of the professor's hand, and the next instant was broken off. The creature clutched

not get into cover before the mad-dreaded creature was back. Tom took a glance around, and saw it swooping at the skeleton again. Then it stopped and twisted around and, in so doing, caught the fleeing human, and at once came on their trail with a gallop.

"I'm going to try a shot!" cried Tom.

"Don't be silly! Running is safer!" bellowed Billy at him. But Tom, refusing advice, knelt down on one knee and, leveling his rifle, let fly. His shot was lucky. The creature staggered to a stop. Tom went back a step, expecting to see the reptile collapse. Instead, it broke into sudden fierce life again and clattered towards him. He had another shot and he fired it, but he doubted whether he had hit, for he heard, as ever, the creature's galling feet and gnawing breathing behind him.

He fired a glancing shot—and realised at once that he was running a losing race! His uncle and Billy were two hundred yards ahead. He did not call to them for help, because it was his own fault he had stayed behind. He just put forth another effort.

Suddenly, seeing a tree branch that came horizontally over the way just ahead of him, he leaped for it, as he had done many a time in the gymnasium at school, and at the same time swung up and got one leg over the branch.

In the next instant the reptile's upstanding spines scraped his lower foot as it ran underneath. But he scrambled up out of danger, and for the space of a minute lay along the branch, gasping for breath, while the dissection made frantic efforts to reach him. Presently Billy's voice came back to him:

"Hello, Tom, are you coming along? Are you all right?"

"I'm all right," Tom managed to answer. "You get along to the boat. I'll—I'll follow on directly."

"All right. But be quick. We don't want to wait."

"I'll be coming!" Tom answered.

He saw signs that the hideous creature on the ground was weakening. Tom swung from the branch on purpose to provoke it to movement, but there was no response save a feeble sweeping movement of the tail. At length he ventured to drop to the ground, when even that slight sign of life ceased. He touched the creature with his foot. It was as dead as the iguanodon within whose bones they had sheltered!

"What a specimen to take back!" he said aloud.

"Then we are just right for it," exclaimed a voice at his elbow. He swung round and saw Julius Hapsstein, with half a dozen men at his heels, creeping out of the thicket.

"I am afraid you are just wrong for it!" Tom answered him. "This is our specimen. You will please keep your hands off it."

(Continued on page 23)

Topping Prizes You May Win!



FIRST—

1929 Model
Twin
"Douglas"
MOTOR-CYCLE.



—PRIZE

To be Trained, Tested,
and Presented by
"SMILING"
JIM KEMPSTER,
British speed-way
Champion.



5 ONE-VALVE WIRELESS SETS

(Complete with Accessories.)

100 "WARNEFORD" MODEL MONOPLANES.



5 PORTABLE PERFECTONE "JUNOPHONE" GRAMOPHONES

(With 12 Records Each.)

OUR LATEST AND GREATEST FREE CONTEST!

This is the Third Week of our free competition, the novelty in which is that we ask you interesting questions, the answers to which can be discovered by studying the pictures beneath them.

Now, I don't want you to run away with the idea that this is a difficult competition. The questions asked are on topics which interest you in your sports and are not in the least reminiscent of the class-room. Now, to jog your memory and to help you to find the correct answers, we give you week a full list for use throughout the competition. In that list the answer to every question can be found.

All you have to do is to read the question above each picture carefully, study the picture beneath it, and then write your answer IN INK in the space provided.

When you have filled in all your answers, cut out this pictorial and keep it with the previous sets until next week, when the fourth set will be given, and so on for ONLY SIX WEEKS. With the final set, full instructions will be given, for the reading in of efforts and the necessary coupon. The rules governing this contest will give last week and will be printed again with the final pictorial.

"QUESTIONPICS" SET 3.

1. What shall we celebrate at the
day after Sunday next?



2. What professional baseball's
team is represented here?



3. To whom does this large air
ship belong?



13. *Dragonflies*

14. *Potts*

15. *Imperial Airways*

16. What bird do we see white
and cinnamon?



17. A famous machine engineer's name
is depicted here. Who is he?



18. Which is the most successful
air-speed racing machine?



16. *Red Knot*

17. *Maurice*

18.

NEW READERS

By ordering from their newsagents a copy of "Our week's HISTORY" book, which contains the first ten sets and the Pott List, you

CAN START NOW!

TAKING CARE of your VALVES!

Wireless valves are delicate and expensive things. Mis-handling will shorten their lives and put you to a great deal of unnecessary outlay for renewals. The advice given here will save you much dipping into your pocket.

EVERY fellow possessing a valve receiver, and naturally anxious to get the very best reception of stations and reproduction on the phones or loud-speaker, should realize that valves are the heart of the wireless set.

Without good valves of British manufacture the lifelike qualities of your receiver will never be properly revealed. And all valves, because of their high price, must naturally be taken great care of, otherwise they will be only short-lived and you will be faced with expensive renewals.

In the old days, when we used what were called "bright smitters," the filament was fairly robust and thick (and, incidentally, it consisted of large current from the L.T. accumulator). If you tapped these early forms of valve with your fingers, or any external form of vibration was imparted to the set, there was no sound emitted from the loud-speaker over and above the normal signals thus being received.

ANTI-PONG HOLDERS.

With the modern dull-smitter valves, designed to take only a small fraction of current from the L.T. accumulator, the filament is about as fine as human hair. You will see, therefore, that if you tap this valve, the filament actually vibrates inside the bulb of the valve. The result is a ringing noise from the loud-speaker, and, of course, it is most objectionable when such a note occurs while listening to a programme.

The valve which we use in the detector position of our set is more likely to produce ringing noises than any other, and so it should always be mounted in a holder provided with spring contacts—known as an anti-pong holder.

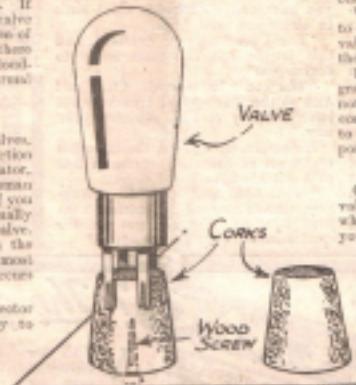
Any vibrations which may now be imparted to the set, as the result of a heavy vehicle passing the house or someone's lumbering trudg across the room, will then be absorbed by the springs, and so prevent them being transferred to the valve and causing unpleasant noises.

It is a good scheme to use one of these special valve-holders in the detector position of your set instead of the cheaper solid type of holder. It is an advantage

to use these spring holders in every valve position, for the springs absorb any damage being done to the delicate filaments.

RUBBER HEELS WILL DO.

Another effective way of protecting the valves against shock and those accompanying microphonic noises is to support the whole of the cabinet, or baseboard, if there is no cabinet, on several folds of some soft, thick material. Or small rubber feet may be fitted on the underside of the base at the four corners, and rubber doocots, Scotch balls, cat's whiskers, or even rubber boot-laces serving for this purpose.



This holder for valve storage is an effective one as it is cheap and simple—just a cork secured to a piece of wood by a screw!

Having realized that your valves are delicate pieces of apparatus and require care in handling, you will know not to leave them lying about when removed from the set. They may roll or be knocked on the floor, hence it is a good plan to provide some form of valve rack to accommodate them.

An egg-crate serves admirably for the

A handy little valve-rack like the one in the photograph is easily made out of scrap wood.

*Our Wireless Page,
Conducted by
the Editor of
POPULAR
WIRELESS.*

purpose. And a handy little valve-rack like the one in the photo at the head of this page is easily made out of scrap wood. The handyman can buy a dozen medicine bottle corks from the chemist for two-pence, and mount these vertically on a piece of wood about eight or nine inches square, by means of screws passed through the wood from the underside. When the valve pins are pushed over the corks they are held firmly in place, as shown in the diagram.

Another tip—be very careful to pay particular attention to the information given on the paper slip enclosed in the valve notice. This will ensure that you use the proper voltages for your valves, and their useful life will then be a long one.

Whenever you are making alterations to your set you will, of course, take the valves out of their sockets and store these safely away until they are wanted.

In removing and replacing valves grasp them firmly by their bases, and not by the bulb. Valves are strongly constructed nowadays, but it is as well to subject them to as little strain as possible.

THE PLATE LEG.

Constant removal and replacement of valves will help you to know at once which way they go into the holders. If you look at the base of a valve you will see that one leg is a little way away from the others. This is the plate leg, and you should fit the plate leg on the holder and, press the valve gently in. It should need no persuasion—if it does then you have probably got the valve the wrong way round.

Always disconnect the H.T. battery before removing valves from the set, otherwise when you replace them you might attempt to put the legs in the wrong sockets and put the full high-tension current across the filament—and bang goes ten skillings and sixpence!

Whichever method you use to store your valves, make sure that they are well out of harm's way—that nothing in the way of pins or screwdriver can be dropped on to them. A smashed valve is expensive and dangerous!



The Editor Talks

Address your letters to:
The Editor, THE MODERN BOY,
Fleetway House, Farringdon Street,
London, E.C.4.

All letters must bear full name and address of the writer.

HOW are you all shaping up and to-day it is practised by all boys in Japanese schools, both for the purpose of learning self-defence and for exercise. It is one of the very best forms of exercise that a fellow can take up, for it brings into play every muscle in the human body.

Even though the third set of "Quizzes" has appeared (page 26), this week you are still in time to make a start—whether you are a new reader this week or an old reader who has already lost last week's "Mosaic Boy."

The first set of "Quizzes" was reproduced in last week's issue, together with the second set. So if you obtain that issue you can start at once on a level footing with those who already have the volumes written down.

Some of you may be waiting to get in more than one complete set of "Quizzes"—a complete set consisting of "Quizzes" Nos. 1 to 6, inclusive. Of course, you may do so. If your newspaper cannot supply you with the necessary book numbers, apply to "Mosaic Boy Book Nodder Department," Box Alley, Farnham Street, London, E.C.4. Each number required will be forwarded, free postage, with postage paid.

Now before coming along with another in "Mosaic Boy" I want to say a word again. Most boys have heard of the Japanese Art of Self-Defence known as "Judo." And they have heard of it, and that's all. There is a notion in the back of their minds that Judo is "twisting a boy's arm about and making him yell." Now, I have heard the stories of a professor in this great set, he is the founder of the British and Dominion Judo League, and he will tell in "Mosaic Boy" all the details of action photos, and also in my opinion of action photos, however may appear to be expert exponents of Judo, by real things.

The Japanese word "judo" given to a form of self-defence invented by the Japanese who were the beginning of Old Japan and who kept the art secret for 2,000 years. It is only about twenty-five years ago, that Judo became known and practised in Britain.

To the Japanese, *jinsei* is equivalent to what boxing is to a Briton.

The professor's signs will show you all the jabs and twists and explain them clearly. And though you may not perhaps ever have to use any of them, an opponent you will certainly get no end of fun in practice

NEXT WEEK'S SPECIAL FEATURES.

THE DESERT LINES.

The conquest of the Sahara Desert. There are 4,000,000 square miles of it—it is one of the most desolate and forbidding places in the world. We are to receive in its company—by a motor anti-aircraft vehicle—in the wings of a friendly aircraft 150 passengers.

THE PLOT AT PRINCESS PARK.

"Find Out" would not be a bad title for this gripping, suspenseful story by George E. Rochester. A chapter certainly takes a very prominent part as passengers on "Joyce Parker" hurried out through the misty, wet, exciting events which happen in the near or night of a lonely caravan.

SHOOTING TO SAVE LIVES!

A most remarkable invention—a pistol designed to save lives instead of taking them—a new form of weapon to combat the war's hero—desert rats of scalding waves, howling gales, and jagged, spiny rocks!

BALVING, THE SURVIVOR.

Claire Curtis has this story of war excess, the killing of a hundred bravely besieged around with spiders and ants, and their camp-making in mudholes—each hole of the Islands and its survivors are facing tremendous odds in this gripping story of life in the South Seas by Charles Hocken.

IN THE TRACKLESS RAINFOREST.

The wild country as far as Tim Rogers and his crew could see was shrouded. It seemed a world of the dead, for there was No sign of any living thing other than the natives, in Thailand. A terrible experience, when together with the great Australian bushman Tim Rogers tells his own story in next week's issue.

TWO SETS IN ONE!

A unique opportunity for the fellow who is within range of a medium broadcasting station that who reads a value lesson in a comprehensive programme.

STAMPS, RAILWAYS, ETC., ETC.

Two sets in one—two sets in one change. This series will appear weekly in "Mosaic Boy." Book selling your dreams about don't you think?

Following my usual custom, I am this week presenting a few more topics, sent by my "Loyalty Boxes" experts, to "Mosaic Boy" readers, astute for knowledge and information on knotty or interesting points. What about that mystery of yours—the problem which has been simmering in your mind for such a long time? Let me have it, please, and it shall be cleared up as soon as possible.

reply or advice can be written down and posted off to you!

How Thick is a Deep-Sea Cable? In the depths of the ocean, H. R. (Croydon), a telegraph cable is about two inches thick; nearer the shore it is a little thicker to avoid damage from ships' anchors.

Is "Puffin Billy" a Bird or an Engine? Puffins are northern seabirds with strongly-coloured looks, S. M. Dougall (Inverness). "Puffin Billy" is the nickname of an ancient railway locomotive.

Who first went up in a Balloon? A chicken, a duck, and a sheep were the world's first "balloonsists," "Airby" (Staines). They were sent up from Paris in a hot-air balloon, constructed by two brothers named Moignoys, in 1783. A month later a Frenchman named Louler went up in a similar balloon—with a rope tied to it, so that he could not go higher than 100 feet!

How long have we had Partridges? The domestic partridge "set" was first issued in 1860, James Hawker (Selby). In the year 1300 silver Partridges were in circulation; England had copper ones in 1672 and Charles II issued 16 farthings with a copper centre.

Are there any flat Earths? All rods are flat and ribbed like an oil lamp, S. J. (East Grinstead), and an oil has to be about a year old before it becomes completely round.

What does a Flying-Sell Weight? Weighting is the weight of a good-sized diving bell, Eric March (Bridgwater). Medium operators prefer light and balanced to balance the weight against intermediate weights others on the ring containing the air-burner chamber.

What is the difference between "Dragon Fire" and "Gas Fire"? "Dragon Fire" is a term meaning rapid and continuous bombardment of an enemy position. L. N. Horns (Peterborough). "Gassing" is the familiar name for gas used to smother before their fire parades of the day!

How Big is Brooklands? The change group, the famous British Motor racing track, H. Marston (Southgate) rates 122 yards. The track is built of concrete and is nowhere less than 100 feet wide.

What are the "High Seas"? Those parts of the ocean which are beyond the horizon, J. S. Cheshire. Countries have control only of the sea three miles outside their shore-line; beyond that the ocean is open, and is called the "high seas."

The Editor