



WELCOME TO NEW STAFF - JANUARY

(Seated L to R): Jewell Johnson, Department of Technical Operations, from Auckland; Barbara Zeitlin, Administration Department, from New York City; and Mary Lou Hopkins, Department of Technical Operations, from Hastings, Nebraska. (Standing L to R): Stanley Panickaveetil, Administration Department, from Emakulam, India; James E. Jeter, Jr., Administration Department, from Alexandria, Virginia; and Ricardo V. Diaz, Administration Department, from Malaga, Spain.

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	Page
Scudos and Pieces-of-Eight	3
Veni, Vidi,	6
Snowy Mountains Hydroelectric Power Project	8

Cover photograph - IBRD/IFC photographer Bill Bailey caught three of our staff members on an occasion when they were wearing the dress of their homeland and made this picture for Bank Notes. The young ladies are (L to R) Kyoko Edayoshi, Serena Han and Boonkrong Cherdboonchati.

## Scudos and Pieces-of-Eight\* Leo Cancio

hortly after the discovery of the New World, Charles V, King of Spain and Emperor of Germany during the first half of the Sixteenth Century, ordered the minting of a basic gold coin called the "ducado" or "scudo," equal to ten silver

"reales." A very few pieces of ten reales were ever coined, and the silver "peso" or "duro" (peso means weight, duro means hard), or piece of eight reales (reales were called bits by the English), weighing about one ounce, soon became the standard coin which, with the scudo, was to circulate unchanged for centuries.

The discovery of America placed immense riches in the hands of Spain: the records show that from only one silver mine in Potosi, now a town in Bolivia, silver equal to about a billion pieces-of-eight was extracted under the Spanish viceroys. Spanish-speaking people still say, when referring to a very rich person: "vale un Potosi." Many of the mines in the New World were owned by the Crown and of all privately mined gold and silver, one fifth had to be turned over to the Spanish King's tax collector.

Very soon after the Conquest, mints were established in the capitals of Spanish America. The mint of Mexico was the first in 1534. A mint in Lima was opened in 1565 and transferred to Potosi in 1572, to be closer to the best source of silver. In 1659 the Lima mint was reopened, and mints in Bogota, Guatemala and Santiago were added, in 1622, 1733 and 1749 respectively. Gold and silver were mined so fast that the mints only had time to produce crudely hammered pieces. The roughly-shaped blanks were struck cold on an anvil and very often the finished product was an oddly shaped piece showing only a part of the design of the dies. No pieces-of-eight are known to exist from the earliest times of the Mexican mint although the Spanish laws authorized their minting. The largest Mexican pieces of the first issues were of four reales struck in the name of Charles V and his mother Joanna. (See Fig. 1). The first Lima and Potosi coins were struck in the name of Philip II and included the eight real piece. Figure 2 illustrates a Potosi piece-of-eight of Philip II. In the 18th Century very ugly pieces were still being struck. Figure 3 shows a Potosi piece of two reales of 1732. A drastic reform then took place. A Scotsman had invented, at the beginning of the 18th Century, a new coining press or "mill" which produced "milled" coins with reeded edges. Although the press was run by animal or water power, its coins did look very much like pieces produced by modern machinery. Spanish Bourbons, kings with a French taste for perfection. became

3

<sup>\*</sup>Editor's Note: In the August 1961 issue of "Bank Notes," Mrs. Jeanne McLennan wrote about coins of the ancient Greek and Roman world. Mr. Cancio, another numismatologist on the Bank staff, covers another chapter in the history of money in this article on coins of the "New World."



utterly disgusted with the looks of their coinage and ordered their mints to use the new presses.

In due course, royal vanity required the handsome profile of His Majesty to be used on the coinage (Fig. 4). Around 1800, many Spanish pieces-of-eight which were kept in the coffers of the Bank of England were validated, for circulation at 5 shillings, with a counterstamp of the head of George III struck on the head of the Spanish monarch. English humor quickly referred to these pieces as the "head of a donkey on the head of an ass."

By 1600 Spanish currency had become what the U.S. dollar is now: a common measure of values and a medium of international exchange. An Act of the British Parliament made Spanish coin current in the British King's Colonies in America. Both in Spanish and English America, pieces of two reales, also called "two bits," pistareens or, in Spanish, "pesetas," were the most popular coins for everyday transactions. In 1720, Edward Hunt, a Philadelphia silversmith, was hanged for making his own private issue of Spanish two bit pieces. Apparently, he was the first man to suffer the death penalty in the Thirteen Colonies for counterfeiting. His wife was sentenced to life imprisonment for passing the coins, knowing them to be false. In 1775, the Continental Congress of the United States issued promissory notes payable in "Spanish milled dollars or the value thereof in gold or silver." By law, Spanish currency was legal tender in the U.S.A. until as late as 1857.

In the 20th Century, the U.S. dollar, still containing the eight bits or reales of the Spanish piece-of-eight, upholds, although perhaps only on paper, the tradition of the old coinage.

After 1821, the pesos of the newly independent Spanish Colonies were at first of the same weight and fineness as the traditional Spanish

pieces. Time and monetary policies soon took their toll of the intrinsic value of these diverse currencies. To the Dominican Republic and Cuba, which were the first lands settled by Spain in America, goes the dubious honor that their pesos have been the last to be worth the full eight bits of hard silver.

In due course, one gold scudo became roughly equal to two silver pieces-of-eight. Pieces of half, one, two, four and eight scudos were struck. A "doblon" or doubloon was a double scudo or two scudos. The eight-scudo piece weighed one ounce and was called "onza." Old Spanish-speaking folks nowadays, when wishing to bestow a compliment on a person of sterling character, sometimes still say "es una onza de oro." An early doblon of Bogota is seen in Figure 5. An "onza pelucona" or "big-wig" onza, with reference to the King's wig in the style of the times, is shown in Figure 6.

The constant flow of trade and precious metals from the New World to Spain, awakened, very early, the covetousness of picaroons and free-booters. Normally, Spanish fleets, loaded with riches, would leave Cartagena, Panama and Veracruz twice a year and gather in Havana to cross the Atlantic in convoy. Pirates, sometimes in the service of enemy nations, but very often in private practice, hovered about hoping for a storm or other calamity which would single out into their hands one of the coveted vessels, and, at times, their wishes did come true. Galleons, doubloons, emeralds, pieces-of-eight, bottles of rum, pistareens, the Spanish Main, lace mantillas, the plank, are, even now, synonymous with romance. However, like so many things in life, it is just a matter of point of view ..... The merchants of Spanish America probably did not feel very romantic about having their savings plundered and being forced to walk the plank.

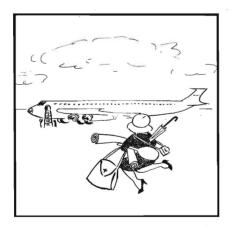


### VENI, VIDI,.....

by an Anglicized Colleen

Before my departure for the New World, many hours were spent pondering all the scraps of advice, suggestions and anecdotes I had heard in an effort to piece together a picture of the Great Unknown into which I was venturing. My preparations were most meticulous. To placate maternal fears I became involved in all sorts of weird, unfeminine legal matters. By the time my D-day arrived it would have paid even a half-witted, misdirected highiacker to blow up the plane if he could have benefited from my insurance.

With the usual misgivings, tinged with a measure of expectancy, and armed with a rug, tennis racket,



camera, overcoat, hat, umbrella, and an oversized handbag with a five pound transistor radio inside, I set forth for the airport to weigh in. I took great delight in exploding the myth that sixty-six pounds was the maximum avoirdupois an im-

migrant was allowed. I had eighty pounds but at least fifteen were over my arm.

Everything going according to plan, I left my family to have my papers checked. Strictly against all rules and regulations I rejoined them by means of a ruse a few minutes later on the observation platform. We were watching the airport bus disgorge a full load of passengers who were dutifully crocodiling up the steps to a modern version of an aerial Noah's ark when the reaction set in. I was not among the voyagers. frantic searchings for my ticket to prove I was a malingerer, the airport bus made a return trip and deposited a solitary, flustered passenger aboard.

The take-off was unhampered, but I barely had time to settle my belongings and sigh a little sorrowfully when the engines changed tone and, twenty-two minutes after take-off, we landed at Shannon. There I witnessed the speediest unloading of a plane I had ever seen, and a hundred yard dash across the apron which left me breathless. Being feminine, curiosity got the better of me so I joined the race and brought up the rear puffing. The finishing line was the Duty Free Shop where the ladies congregated at the cosmetics and clothes counters and the men .....? I joined the ladies and bought my scent, but when I returned to the Boeing, again bringing up the rear, I was clutching my

trophy, won in a male scrum, of a small but highly significant bottle of my favorite nectar.

The journey into the west then began in earnest. We chased the sun, which we never let set, to Idlewild quivering in a heat of some eighty degrees. Again maintaining my tail position, I gathered up my belongings and even remembered the pink scarf intended as the secret sign by which my hosts could spot me.

Then it happened - my first experience in the Great Unknown. The heat hit me and my temperature rose as if to outrival the eightyodd degrees. Glistening fountains, crystal clear, and tinkling barely audibly lured me like sirens into their company. The temptation was almost overwhelming. But somehow I was bustled through Immigrations to Customs. As the Customs man and I were struggling valiantly with the last obstinant case, I was approached by a man apparently hired by my hosts to track me down. I was gently propelled towards a car into which I was firmly deposited like a naughty child. There, for the first time in this Great Unknown, I was alone.

My American hosts arrived, cool, calm and utterly charming. Sensing my tiredness and dishevelment, they steered the conversation to a guided tour of the New York skyline as we hummed along on the "wrong" side of the road. My questions came incessantly like machine-gun fire: then silence, while in my weariness I allowed

myself to be completely fascinated.

The next morning I awoke at a very odd hour as my mental alarm still remained adamantly European. But soon after breakfasting on lovely coffee cake, called Danish and pastry, I was ready for my first tour of inspection. First came the Waldorf Astoria. Next the shops on Fifth Avenue. Then Rockefeller Plaza, St. Paddy's, etc., ending with lunch at Schraffts. There, at my first American restaurant meal, I was introduced to that delicious ice cream which has been my ruination ever since. In the afternoon, unaccompanied except for a map, I wandered around but was soon frantically looking for a secluded place where I could take off my shoes. Those eighty-odd



degrees had caught up with me again. This turned out to be a fatal mistake as I spent the rest of the afternoon in the cool environs of Radio City wrestling to put them on again.

(Continued on P. 11)

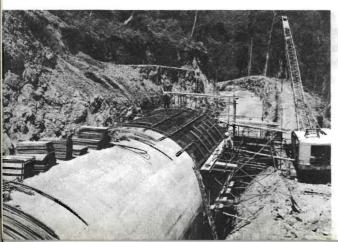


The Snowy Mountains which form part of the Great Dividing Range in southeastern Australia. These mountains give rise to three great rivers, the Snowy, the Murray and the Murrabidgee.



Heavy earthmoving and road construction equipment cutting an access road through to the new Murray No. 1 project in the Snowy Mountains.

Construction of an underpass to take a road beneath the Murray No. 1 pressure pipelines.





# SNOWY M HYDROELECTRIC

On January 24, 1962 the WORLD BANK made a loan equivalent to \$100 million to the Commonwealth of Australia to assist in financing a part of the Snowy Mountains hydroelectric power scheme.

The Snowy Mountains scheme is a large undertaking for the production of electric power and the provision of irrigation water in southeastern The Mountains consti-Australia. tute the highest portion of the Great Dividing Range and are the source of three rivers, the Snowy, the Murray and the Murrumbidgee. The Snowy River drains the Kosciusko Plateau on the eastern side of the Divide and flows southeast through the well-watered coastal belt of eastern Victoria running to waste in the nearby Tasman Sea, The Murray and Murrumbidgee Rivers drain the valleys and gorges on the inland side of the Divide and flow westward through hundreds of miles of fertile alluvial plains before reaching the southern coast. Irrigation is already well established on the plains but more water is required if further expansion of agricultural production on a large scale is to be achieved.

The Snowy Mountains scheme provides for the waters of the Snowy River and its tributary, the Eucum-



## DUNTAINS

#### OWER PROJECT

bene, to be trapped before leaving the high elevations and to be diverted inland by long tunnels through the mountains to the western rivers. In traveling through the transmountain system of tunnels and shafts, the diverted waters will fall over 2,500 feet, generating power as they pass through the turbines of several large power stations. At higher elevations, other power stations will generate power from the waters of the rapidly falling rivers before they reach the main diversion projects.

The scheme embraces an area of nearly 3,000 square miles and involves the construction of nine large dams and many smaller ones, approximately 100 miles of tunnels, 11 power stations and over 80 miles of aqueducts high in the ranges to catch the mountain streams which otherwise would miss the reservoirs and tunnels. When completed it will provide 2-1/2 million kilowatts of power and approximately 2 million acre-feet of water a year for irrigation.

The Bank project is known as the Murray No. 1 hydroelectric development. It will add 760,000 kilowatts of generating capacity to the scheme and is scheduled for completion in 1967. It involves

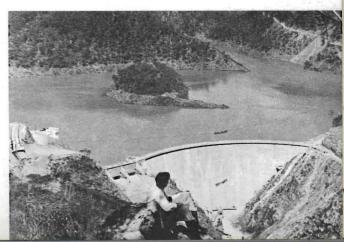


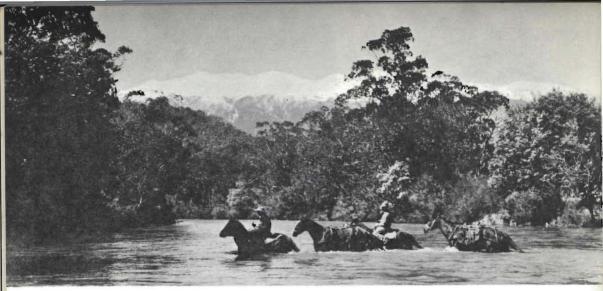
Surveying for a new road which will form part of the Snowy Mountains Scheme.



An aircrast of the Snowy Mountains Hydroelectric Authority slying over Mount Kosciusko in the Snowy Mountains.

The Tumut Pond Dam and Reservoir which is part of the total scheme.





Getting from place to place in the Snowy Mountains often necessitates the use of horses. Here a survey team of the Snowy Mountains Hydroelectric Authority crosses the Swampy River to reach their site of operations.

the diversion of the Snowy River into the westward flowing Murray River. The works to be undertaken include the construction of three large dams, two long tunnels, a pressure tunnel and twin steel pressure pipelines to carry water to the Murray No. 1 power plant in which eight 95,000-kilowatt generating units will be installed. The

water available for irrigation on the western side of the mountain range will be increased by 440,000 acrefeet a year. The full benefits from this phase of the scheme will not be achieved, however, until the Murray No. 2, 440,000-kilowatt power station, is finished in 1970 when a further 360,000 acrefeet of water a year will become available.

Eucumbene Lake and Dam which are part of the hydroelectric power and irrigation scheme.



VENI, VIDI . . . . (Continued from P. 7)

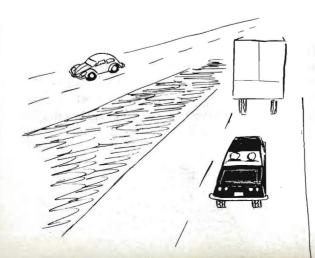
The buses terrified me, the traffic came from all the wrong quarters and the police looked positively menacing with their battery of weapons jangling nonchalantly around their waists. But I soon discovered that most of these walking arsenals had distinct brogues which dissolved the distance across the Atlantic almost magically.

Sunday I was driven to Washington on my first tumpike. My host, profering information in the most amazing detail, quickly whittled away the four-hour drive. It was only when my baggage was duly deposited in my hotel room that I discovered my most important bag was missing. In it were my trophy from Shannon, my night attire, my cosmetics, all my trinkets and money except for thirty dollars, every single paper of any import and my curling pins. This was just the perfect introduction to the American variation of the Scottish born Mr. Graham Bell's invention, which was how I enlightened my New York hostess of what exactly was in the case I had left with her. On her advice I went in search of that most American of institutions-the Drug Store - where I eventually purchased some curling pins and a few other items. All the while, in the back of my mind, I was wondering how exactly my suitcase would arrive since it was being "shipped" - a word I associated only with maritime connotations.

The next morning, feeling very foreign, I proceeded to 1818 H Street hoping someone would recognize me as I had no paper to prove the identity of the flesh and blood in front of any inquirer. I must have rung a bell in several minds for I was not only recognized but welcomed. Perhaps that passport photograph on the Form 12 is not as unrealistic as I had hoped.

Now, after six months, I wonder where my Great Unknown has gone. I cannot find it anywhere, nor do I know exactly when it disintegrated. Just an awareness is left that all the new things I am absorbing every day are forming a picture, tantalizing and intriguing in its incompletion, but very different from the one I pondered over for so long before venturing forth.

"VICI?"





### NEW PROFESSIONAL STAFF



Juan R. Alvarez Prado, an Argentinian, has been working as an International Finance Corporation engineer since January 4. Mr. Prado has both a mechanical and a civil engineering degree from the University of Cordoba in Argentina. He worked initially in textiles in Argentina and from 1952-55 was a project design engineer with the Argentine construction firm of Siemens Shukert. Mr. Prado was project engineer for the National Lead Company in Cuba for four years and for eighteen months before joining I.F.C. was construction superintendent for Research-Cottrell, Inc. in New Jersey.



Bernard H. Decaux, a Frenchman, has been with the Industries Division of the Technical Operations Department since January 8. He is a graduate of the Sorbonne in economic history and has his degree in private law and economics from the University of Paris. He was a Fulbright Fellow at the University of Chicago in 1953, studying business management. From 1955 until he came to Washington, Mr. Decaux worked with Esso Standard of France in their Economic Studies Division in charge of the section making energy and industrial analyses. Mr. and Mrs. Decaux, their four year old daughter, Sylvie, and ten months old son, Francois, are living in Georgetown.



Donald S. Mitchell, Jr. brings long experience in the U.S. Department of Interior's Bureau of Reclamation to his work in the Agriculture Division of the Department of Technical Operations which he joined on January 15. Mr. Mitchell is not a newcomer to the Bank, having served as land and water management consultant on the Peruvian Mission. He has his degree in agriculture from the University of California and twenty years of downto-earth experience in irrigated farming on his own land in Colorado. Mr. Mitchell was first with the Bureau of Reclamation from 1936-43, worked out of their Denver regional office from 1944-50 and has been in Washington since then. Mr. and Mrs. Mitchell live in Hyattsville.

E. Bevan Waide, an Englishman, joined the Department of Operations - Far East on January 15. He has his B.A. in economics from Cambridge University and is receiving his M.A. in international trade and development from the University of California this summer. Mr. Waide was both a teaching and research assistant in the economics department while studying in California. He was also the U.K. representative at the U.N. Interne Course for Graduate Students in 1959. Mr. and Mrs. Waide are living in Alexandria.

Theodore J. Crausway, from New York City, an I.B.M. data processing expert, has been working in the Treaserer's Department since January 22. He is a graduate in accounting from St. John's University in Brooklyn and learned the intricacies of I.B.M. equipment at various I.B.M. schools. Mr. Crausway started his career with the United States Life Insurance Company, worked in the Public Library Finance Department for two years and was I.B.M. supervisor and accountant for New York Airways, a helicopter service, for the past six years.





#### TEN YEAR STAFF - FEBRUARY

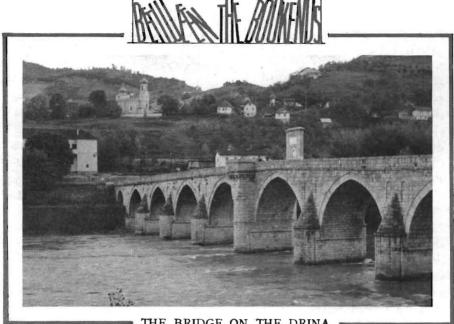
Anne Marie Kalivoda (L) and Mary Dowding.

Mary Major (inset) in the Paris Office also celebrates ten years with the Bank this month.





FIVE YEAR STAFF - FEBRUARY Frances Granville-Smith



THE BRIDGE ON THE DRINA Commented on by Ralph L. Bloor

Shortly after reading Ivo Andric's Pulitzer Prize book\* I had occasion to see this beautiful 400-year old bridge and bring back the above snapshot. Evidence of the fact that it is still greatly beloved in Yugoslavia is that it has been damaged in the last two wars and each time has been carefully rebuilt to look exactly as it did before. In the last war three spans were down.

The bridge has some engineering significance in connection with an application for a loan from the Bank for the Bajina Basta hydroelectric project some distance downstream. The bridge was submerged once in its long life by a flood and a highwater mark was placed on the raised panel carrying the Turkish inscription above the upstream rail. In order to determine the needed spillway capacity at Bajina Basta, a hydraulic laboratory model of the bridge and adjacent river valley was constructed; and, knowing the exact height of the water, the stream flow during that very unusual flood could be determined with great accuracy.

Although the road across the bridge is not a very important one now, readers of the book will be glad to know that when I visited the bridge recently the citizens of Visegrad were still strolling across it in the evening enjoying the view of the valley and that it was not far to an old hotel where they were still sipping plum brandy and Turkish coffee.

\*A recent addition to the Staff Relations Lending Library, Room 200-E Extension 2685.

## Personals

BIRTHS: Juan Carlos Soliven, first child for May Vega and Manuel Soliven, was born in Manila on January 16, about a week after his father reported to Washington to join the 1962 General Training Program.

Nicolas Panel, third child for Marie-Anne and Jean Panel and baby brother for Vincent and Marie-Francoise, weighed 6 lbs., 10 ozs. at birth on January 25 in George Washington University Hospital.

Kenelm Edward Lee Guinness, first child for Sir Kenelm and Lady Guinness, was born on January 30 in Georgetown University Hospital and weighed 9 lbs., 15 ozs.

Fay and Stanley Sommerfield's baby boy, Mark Stanley, made his early appearance on Saturday, February 10, in George Washington University Hospital and weighed 5 lbs., 14 ozs.

ENGAGEMENTS: Elaine Muller's engagement to Donald Brown of Surfers Paradise, Queensland, was announced shortly after her return from home leave. Mr. Brown is coming to Washington for the wedding some time in the spring and the couple will return to Australia to live.

MARRIAGES: Best wishes to Elisabeth Beatrice Baring and Nicholas Gibbs who were married on January 15 at St. Michael's Church in London.

CONGRATULATIONS: To Monica Ruck who received the Anne Dupont Memorial Award for placing third in the recent regional auditions of the Metropolitan Opera Company.

To Eugene R. Black who received an honorary degree from the economic faculty of Hamburg University on January 19.

HOME LEAVE: Eileen Blake and Valda Hudson are traveling together from San Francisco to Sydney on the Pacific and Orient Line's new ship, the Canberra. They will make the trip in two and a half weeks and from Sydney Eileen will continue on to Brisbane and Valda to Auckland.

Vany Elias is enjoying the sunshine in Rio de Janeiro while she visits her family and friends.

GOOD LUCK: To Rosemary Garran who will be in this year's Hexagon Club show, "Please Stand By," given for the benefit of Children's Hospital, on February 28, March 1, 2 and 3 at 8:30 p.m. in the Western High School Auditorium. Tickets are available at the auditorium or through Rosemary here at the Bank.

#### IN MEMORIAM

Thomas Basyn, former Executive Director of the Bank, January 16, in Brussels.

Francis Schettig, brother of Betty Warburton, January 19, in Quakertown, Pa.



It now looks as if none of the teams is going to be able to catch up with the indomitable Printers and unseat them from the lofty first-place they have occupied for so many weeks. Nevertheless, the competition for second place is as keen as ever and at the present can be seized by any of seven teams with a modicum of good luck. Events will not be dull for the rest of the season.

First, let us look at the incentive award which we instituted this season. When it was started the Bowling Committee felt sure that very few would attain this award and so it would have little effect on our resources. By February 9th, 44 bowlers had become \$1 richer and nearly threatened to bust the bank! However, they're committed, so we will keep right on getting richer while the treasury gets barer.

Since we had to contract for 33 nights of bowling and as our league bowls only 27 times to complete its three rounds, we have six evenings available for tournaments - and there will be no extra charge over the usual \$1.50 for these nights. Perhaps the anticipation of winning a prize at one of these special events will console us for not being able to cut down Printers' lead.

On Valentines Day, the first round of the annual tournament will take place between the five "top" teams of the Bank and Fund, and the following Wednesday the second round when the five "bottom" teams will compete. This tournament is particularly challenging for Bank teams since everyone's average seems to automatically rise when bowling at Lafayette.

To encourage new bowlers, the League is going to have BEGINNERS' NIGHTS on March 14 and April 11. All new bowlers will be welcome as well as those who wanted to bowl more this season but were not offered the opportunities - watch for the notices about these nights.

KNAPP'S KNOCKOUT KONTEST will be held on March 28. On this night, Mr. Knapp has graciously offered to give prizes to the best bowlers and, even better, has suggested he will try to win one of his own prizes. We have missed Mr. Knapp this season and regret the pressure of Bank business has prevented him from joining us.

Plans are going ahead for the party which we hope to hold on either the 18th or 25th of May, and Mr. Black has indicated his wish to be with us at the party.